ABSTRACT

E. Christopher Caynor. SHOVEL TESTING THE SQUIRE'S RIDGE (31ED365) SITE: EDGECOMBE COUNTY, NORTH CAROLINA. (Under the direction of Dr. I. Randolph Daniel, Jr.) East Carolina University, Department of Anthropology, April 2011.

In this study, artifacts from the 2009 field season at Squire's Ridge (31ED365) are analyzed. One-hundred and fourteen shovel tests were completed by students under the supervision of I. Randolph Daniel that account for approximately 7000 artifacts. Three main categories of artifacts are considered by the author: stone, ceramic, and miscellaneous. The assemblage includes artifacts diagnostic of the Early, Middle, and Late Archaic and the Early and Middle Woodland. A spatial analysis is completed using artifact density maps created in Golden Software SURFER 8. This analysis reveals an occupation that is largely isomorphic with the ridge crest. This study suggests that the archaeology of the North Carolina Coastal Plain will benefit from the continued study of relict sand dunes such as Squire's Ridge and Barber Creek and supports the conclusions of Christopher Moore 2009 that relict sand dunes provided sites for occupation during the Archaic and Woodland along the Tar River. It also provides an initial step in the creation of a culture-history that is specific to the Coastal Plain.

SHOVEL TESTING THE SQUIRE'S RIDGE (31ED365) SITE:
EDGECOMBE COUNTY, NORTH CAROLINA.

A Thesis
Presented to
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Masters of Arts in Anthropology

by
E. Christopher Caynor
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SHOVEL TESTING THE SQUIRE'S RIDGE (31ED365) SITE: EDGECOMBE COUNTY, NORTH CAROLINA.

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DEDICATION

This work is dedicated to my mother and father and the saintly patience they have shown.

Thank you for everything, without you, I would have nothing.

ACKNOWLEDGEMENTS

I must start with the proper academic acknowledgements and thank those who have come before me. As for those who were a direct influence on this work, I must thank Dr. I Randolph Daniel, Jr. for his patience and his knowledge and Joseph Roberts for the knowledge he shared about ceramics. I have also benefitted greatly from the courses I have taken with the faculty of the East Carolina University Anthropology Department and Maritime Archaeology Program. I must also thank my committee, Dr. Linda D. Wolfe, Dr. Tony Boudreaux, and Dr. Holly Mathews.

On a personal level, it is important that I thank Dr. Charles Ewen for talking me through a few moments of academic collapse. My friends from home: Derek Rothermund, Fred, Kristina, and Catherine Gerwig, Travis Doyle, and Lauren Lagana, without whom I would never have survived this part of my life with any semblance of sanity. And, last, but certainly not least, the people who have made North Carolina a place I have enjoyed: Leila McInnis, MaryAnderson Billue, Brian Choate, Joey Roberts, Aimee Bouzigard, Kurt Wagner, Melanie Hamilton, Bach Pham, Kim Fleming, Travis Shinabarger, and Dave and Crystal Vasalech.

This project would not have been possible without Mrs. Betsy Squire allowing excavations on her property. The shovel tests analyzed in this work are the product of the 2009 Summer Ventures archaeology students' field season. Thank you for your contributions to the study of prehistory in the North Carolina Coastal Plain.

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CHAPTER 1: INTRODUCTION

This study presents the results of an analysis done on the archaeological data recovered from shovel testing done in 2009 at the Squire's Ridge site (31ED365) located along the Tar River in Edgecombe County, North Carolina. This analysis was completed during 2010 and 2011 in the East Carolina University archaeology laboratories by this author. First, a technological analysis of the lithic and ceramic artifacts is presented followed by a spatial analysis of artifact distributions across the site. The technological analysis classifies the lithic and ceramic artifact types at the site. The spatial analysis examines the patterns of artifact distributions across the site making comparisons to similar artifact distributions known from the Barber Creek (Daniel 2002; Daniel et al. 2008) site also located along the Tar River.

North Carolina Coastal Plain archaeology of the Early Archaic through the Early Woodland periods (ca. 1200 - 300 BC) is still poorly understood. To date, the study of prehistory in the region has been based upon chronologies and typologies established for the Piedmont region of North Carolina. At some point, however, the archaeology of the Coastal Plain needs to be understood on its own terms (Phelps 1983:13). As of this writing, the only major excavations on a stratified site in the Coastal Plain are those at the Barber Creek (31PT259) site (Daniel 2002; Daniel et al. 2008; Phelps 1983). Squire's Ridge presents a second stratified site with early to middle Holocene archaeological remains to be studied in the North Carolina Coastal Plain (Moore 2009).

A great deal of work has been done in recent years to provide a data set from Barber Creek that can be used to analyze additional sites in the Coastal Plain. Tara Potts (2004) focused on the lithic materials in the Barber Creek shovel tests. Shovel tests from the Barber Creek site provided an excellent opportunity for spatial analysis. (Daniel et al. 2008; Potts 2004) Joseph

Roberts is completing his thesis refining the ceramic chronology at Barber Creek. The graduate work of these two individuals will provide a platform for a comparative analysis of the shovel test data from Squire's Ridge.

Research Questions

What archaeological components are present at Squire's Ridge and what implications exist for understanding Coastal Plain chronology and typology?

A chronological sequence spanning the Early Archaic to Early Woodland is present at Barber Creek. Is a similar sequence present at Squire's Ridge? If so, then it might suggest that sand ridges along the Tar River were occupied throughout much of the prehistory of the Coastal Plain. If not, then settlement differences might have been present with respect to the occupation of the Tar River through time. In any case, the archaeological sequence at Squire's Ridge can help refine the culture history of the Coastal Plain.

What is the spatial patterning of artifacts across the site?

Is artifact distribution relatively even across the site or is artifact clustering apparent? How does this patterning compare to Barber Creek? At Barber Creek, some intrasite spatial patterning was noted between the Archaic and Woodland components. If similar patterning is present at Squire's Ridge it would suggest that the sand ridges along the river were being used for similar site function. If not, then sand ridges along the river might be characterized by site functional differences.

Specific Research Objectives

- To complete an artifact analysis by type: lithics, ceramics, and miscellaneous artifacts will be size sorted and classified by raw material and form.

- To determine the temporal components represented by the artifact assemblage at Squire's Ridge.
- To conduct a spatial analysis of the artifact assemblage at Squire's Ridge that represents the Archaic and Woodland components at the site.
- To compare and contrast the Squire's Ridge (this study) and Barber Creek (Daniel et al. 2008) sites' spatial mapping and analyses.

Expectations

The summer 2010 field season saw further excavations at Squire's Ridge that this author was able to participate in. These excavations suggest relatively intact stratigraphy at Squire's Ridge with artifacts that represent the early Archaic through the Middle Woodland. In line with this, ceramics are expected to drastically decline in number beyond the second rough 20 cm level and artifact densities—especially stone flakes and lithic artifacts—are expected to be high across the center of the ridge during all represented time periods.

Overview

The prehistory of the Southeast and a discussion of the previous research conducted in the North Carolina Coastal Plain are provided in the following background chapter. This is followed by a discussion of the methods used in the field during excavations at Squire's Ridge and the methods used in the lab during analysis of the recovered assemblage. Artifact analysis is discussed in detail in the fourth chapter with accompanying figures and table. Diagnostic artifacts in this chapter are used to outline the temporal boundaries of occupation at Squire's Ridge. Spatial analysis is conducted using density maps created in Golden SURFER 8 in the following chapter. Analysis is used to define site boundaries and describe potential differences between the Archaic and Woodland components of Squire's Ridge. Finally, a conclusion discusses the total scope of the artifact and spatial analysis completed in this study and comparisons are drawn between Squire's Ridge and Barber Creek.

CHAPTER 2: BACKGROUND

The Archaic in North Carolina

The Archaic Period follows the end of a poorly represented period of Paleoindian occupation during the Pleistocene and marks several thousand years of prehistory. Until only recently, very little research has been directed towards the Archaic in the Coastal Plain of North Carolina. Most of the previous analysis of the Archaic Period in the Coastal Plain has been completed using surface collections (Ward and Davis 1999:72). David Phelps (1983) identified two forms of Archaic Period sites in the Coastal Plain of North Carolina, base camps and temporary procurement sites. Sites in this period have most commonly been found in close association with a water source. (Ward and Davis 1999:73)

The Early Archaic Period in North Carolina is estimated to have dated from 8000-6000 B.C. (Ward and Davis 1999:24). By convention, the Early Archaic marks the transition to modern climatic conditions following the end of the Pleistocene. North American glaciers experienced a reduction in mass at the beginning of this period due to increased average temperatures. Ward and Davis (1999:2) describe the Early Archaic as populated by small, highly mobile bands. The Early Archaic was a period of small, temporary settlements consisting of structures of simple construction (Steponaitis 1986:371). The Early Archaic also reveals a move to broad spectrum hunting and gathering strategy than that of the preceding Paleoindian Period. Subsistence patterns focused on gathering wild plants, fishing, and the use of the atlatl for hunting medium and small game (Ward and Davis 1999:2-3).

The Middle Archaic Period is defined as the period from 6000-3000 B.C. Middle Archaic projectile points in the Coastal Plain have been identified as following the same technological traditions as those found in the Piedmont region. Stanley Stemmed, Morrow

Mountain, and Guilford Lanceolate are common Middle Archaic point types (Ward and Davis 1999:73).

The Late Archaic Period dates from 3000-1000 B.C. Sites were established away from tributaries in delta regions (Phelps 1983). An abundance of fish and shellfish is seen in the more sedentary camps of the Late Archaic. Camps of this period are associated with the earliest evidence for plant cultivation in North Carolina. (Ward and Davis 1999:75)

The Woodland in North Carolina

A shift towards food production rather than food collection and the introduction of pottery mark the start of the Woodland Period (Ward and Davis 1999:3). In North Carolina, the Woodland Period is dated from 1000 B.C. until A.D. 1600. During this period, larger and more sedentary settlements began to appear. By convention, the Woodland Period is divided into three subperiods: Early, Middle, and Late.

Structures varied widely within and among sites in the Woodland Period across the southeastern United States, a fact often attributed to seasonality in settlements. In addition, burials of this period in the Southeast are accompanied by grave goods, but there is no evidence of social ranking beyond possibly age or gender (Steponaitis 1986).

Early Woodland is considered the period between 1000-300 B.C. (Phelps 1978:11). Subsistence during this time consists primarily of hunting and gathering, but the earliest signs of horticulture can also be traced to the Early Woodland. Evidence exists in North Carolina of small settlements associated with rich soil favorable to agriculture, but there is no direct evidence of agriculture during this period in the Coastal Plain (Ward and Davis 1999:3). Phelps (1983) developed a pottery chronology for the region and identified the Deep Creek type as representative of the Early Woodland. Deep Creek sand-tempered ceramics demonstrate surface treatments including cord impressed, fabric impressed, and net impressed. Phelps (1983:18) designed a three phase ceramic sequence based upon changes in surface type frequencies.

The Middle Woodland Period (300 B.C. - A.D. 800) reveals a diversification in subsistence strategies. Evidence for agriculture appears in archaeological remains where local populations in the Southeast were engaged in trade with the Hopewell and Swift Creek cultures (Ward and Davis 1999:4). Settlements in the coastal plain appear to be associated with the edges of marshlands. Seasonal and short-term sites are extremely common. Grave goods and mortuary treatments of the Middle Woodland in the Eastern United States reveal marked differences. Steponaitis (1986:379-383) interprets these differences as evidence for a system of social ranking in the Southeast.

In North Carolina, Late Woodland ranges from A.D. 800-1600. An increase in population size is evidenced by larger and more complex settlements. A great deal of variation in the sizes and forms of settlements continues in the Coastal Plain during the Late Woodland. Stockades appear at this time around villages in the Coastal Plain. By A.D. 1200, corn and beans were being cultivated in the Southeast (Ward and Davis 1999:4).

Barber Creek Archaeology

The first recognized stratified site in the Coastal Plain of North Carolina is Barber Creek (31PT259), located on a relict aeolian sand dune. This site, containing Archaic and Woodland components, was located through a cultural resources survey requested by Greenville utilities in 1976 (Phelps 1978). David Phelps led the preliminary excavations at the site and used the materials recovered through two test units and shovel testing to argue its importance. Four major arguments were used by Phelps in his appeal for placement on the National Register of Historic Places:

> 1) the fact that it's the only currently known stratified, intact site in this locality; 2) its potential for providing accurate dates for phase separation in the Woodland period; 3) the possible existence of features and structural evidence to clarify the internal settlement pattern of a small riverine habitation site; and 4) the existence of preserved food remains which might permit a better understanding of cultural adaptation to the flood plain-levee ecotone in this locality [Phelps 1977:15].

Upon Phelps retirement from East Carolina University, Randolph Daniel, Jr. became the primary investigator at Barber Creek. Field work in 2000 was conducted using participants of the East Carolina University Field School. The excavations for this season were directed at determining site boundaries and examining the integrity of the site (Daniel 2002:7). Approximately 100 shovel tests were excavated at 10-meter intervals across the entirety of the site. Daniel's work supported Phelps' report that Barber Creek contained stratified deposits from the Early Archaic, through the Early to Middle Woodland periods.

Since the 2000 field season, several more summers of fieldwork have been conducted at Barber Creek. The data from these excavations have been the subject of several student theses and one doctoral dissertation (Martin 2004; McFadden 2009; Moore 2009; Potts 2004).

Martin (2004) refined the Deep Creek sequence by analyzing the available ceramic assemblages and extant collections for the Parker Site and Barber Creek. Martin's results supported Phelps' sequencing with only a few exceptions. Recently, Joseph Roberts completed a thesis that tested and refined the Deep Creek ceramic definition from Phelps 1983 (Roberts 2011).

Tara Potts (2004) investigated the stone reduction activities and the spatial distribution of those activities at Barber Creek. Using 381 lithic artifacts recovered from 106 shovel tests, she conducted a spatial analysis across the site. She concluded that stone reduction activities associated with each component could be separated spatially. She found that Archaic Period activities took place primarily on the northern ridge while Woodland Period activities took place primarily on the southern section of the ridge. Similar results in spatial patterning were obtained with the ceramic materials (Daniel et al. 2008)

Christopher Moore (2009) studied the sedimentology of Barber Creek in relation to archaeological data to understand the processes of dune formation and how these data could be useful in creating a chronology of occupations. He found that anomalies in mean grain size and sorting correlate with artifact densities correlating of periods of dune stability with human occupation.

Paulette McFadden (2009) expanded upon Moore's research with a study of how and when the sand dune at Barber Creek was formed. She concluded that the aeolian sediments began to accumulate after 12,900 years ago, after which time Archaic Period groups occupied the dune. After 9,000 years ago, a decrease in occupation is associated with an increase in aeolian sediments. Site reoccupation again occurred before 2400 years ago when the sand dune stabilized, and continued until sometime around 1000 years ago.

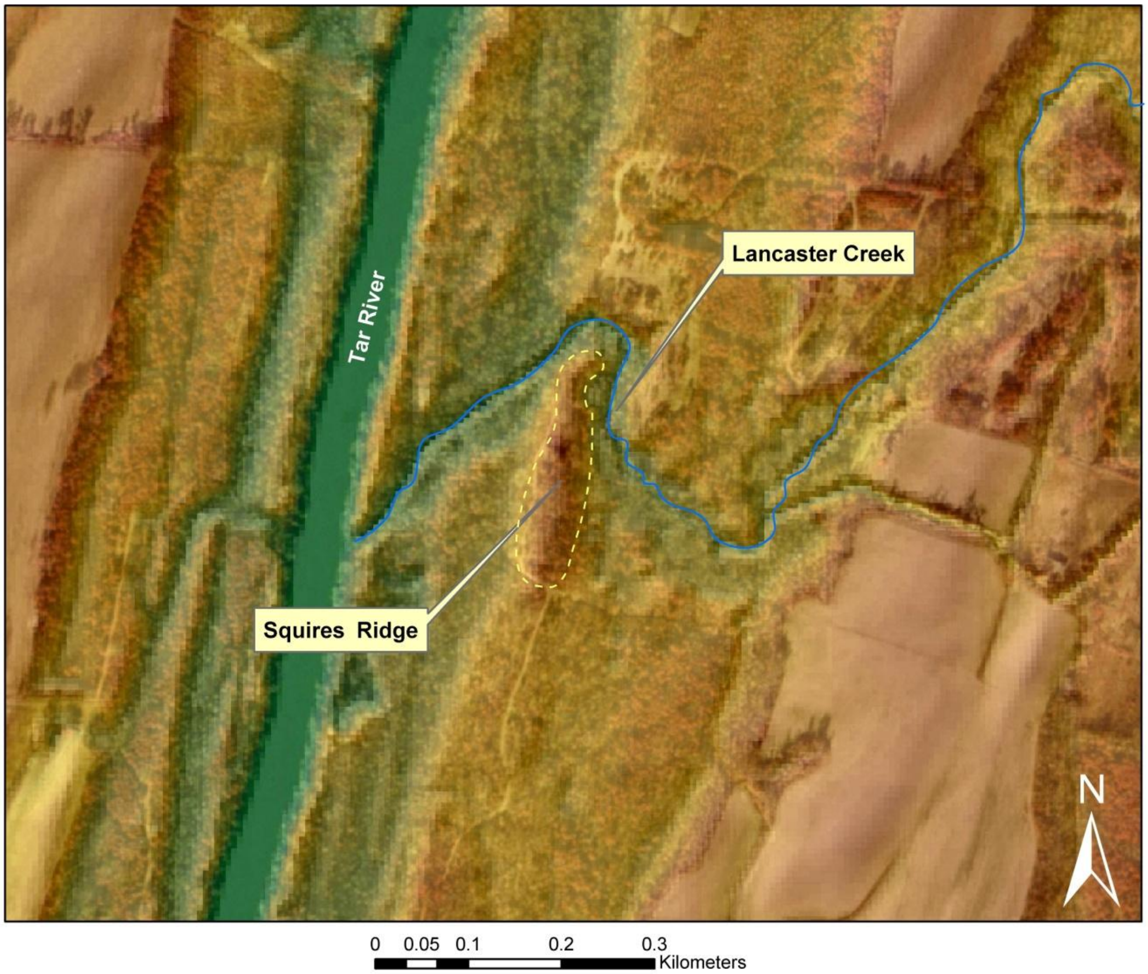

Figure 2. 1. Squire's Ridge (31ED365) aerial photography overlaid with LiDAR data courtesy of Dr. Christopher Moore.

The Squire's Ridge (31ED365) Site

Squire's Ridge overlooks the Tar River in Edgecombe County. The site parallels the river and consists of a sand ridge approximately 11 m above the Tar River floodplain adjacent to Lancaster Creek (Moore 2009:84). Limited shovel tests were conducted in May of 2006 by Christopher Moore. These tests were accompanied by two 2 x 2 m test units. The material recovered from these excavations revealed artifacts associated with the Early, Middle, and Late Archaic and Early and Middle Woodland Periods.

CHAPTER 3: METHODS

In this chapter, the methods used to complete the field excavations, artifact classification and analysis, and spatial analysis of the site are discussed. The data created through these processes is discussed in depth in the Artifact Analysis and Spatial Analysis chapters.

Field Methods

Shovel testing was employed at Squire's Ridge to define site boundaries and to identify potential intrasite differences in site structure in the North Carolina Coastal Plain. One-hundred and fourteen shovel tests were dug at approximately 10 meter intervals across the sand ridge during the 2009 field season by participants in the Summer Ventures program under the supervision of I. Randolph Daniel. These pits were approximately 60 centimeters in diameter and dug to an average depth of 1 meter in rough 20 centimeter levels. Fill from each level was screened through a 1/16 inch mesh. Material from each level was bagged separately by provenience. Of the one-hundred and fourteen shovel tests, artifacts were recovered from one-hundred of them.

Artifact Analysis

Approximately 7000 artifacts were recovered from shovel testing and were analyzed and cataloged by this author for this study. These artifacts fall into three major artifact classes: lithics, ceramics, and miscellaneous materials. Definitions for lithic artifact types are discussed in Appendix A, definitions for ceramic typologies and surface treatments are given in Appendix B, and definitions for miscellaneous materials are provided in Appendix C. Both the lithics and ceramics artifact classes were analyzed following procedures from previous analyses (Cooke 2000; Daniel et al. 2008; Potts 2004). Lithics were sorted by size and raw material and then counted and classified by morphological type (e.g., points, bifaces, cores, debitage, etc.).

Ceramics were also size sorted, counted, and then classified according to existing pottery types for the Coastal Plain primarily based upon temper and surface treatment (Herbert 2003; Martin 2004; Phelps 1983; Roberts 2011). Miscellaneous materials is a residual category that includes historic artifacts, ocher, petrified wood, fossils, bone, nut shell, and charcoal

Size Grade

Artifacts were passed through a series of nested screens and size-graded accordingly. Screen sizes were Grade 1 (25.4 mm), Grade 2 (12.7 mm), Grade 3 (6.3 mm), and Grade 4 (2.88 mm). Ceramics smaller than size Grade 2 were considered too small to be classified accurately and were counted and recorded as indeterminate in type. Lithic materials in size Grades 3 and 4 appear to be mostly flake and shatter fragments (potentially the result of secondary retouch), but it is difficult to be certain given their small size. Likewise, identifying raw material types of these two size grades was also difficult. Nevertheless, an attempt was made by the author to do so.

CHAPTER 4: ARTIFACT ANALYSIS

Artifacts recovered in the shovel tests can be broadly divided into three categories: lithics, ceramics, and miscellaneous. Artifact analysis focused on identifying the number and age of the archaeological components at Squire's Ridge as revealed by their typological classification and context of recovery. The results of this analysis are presented in this chapter. First, stone raw material types will be discussed, followed by stone artifact types and ceramic types, then miscellaneous artifacts, and finally, surface finds from the site.

Raw Material Types

Six different lithic raw material types were identified for archaeological sites along the Tar River (Moore 2009) and a seventh category is presented for indeterminate or unidentifiable stones. These definitions are modified only minimally to fit the definitions used for this study and the assemblage at Squire's Ridge. Sources cited in these definitions follow those used by Moore (2009).

1) Metavolcanic
2) Quartz
3) Quartzite
4) Orthoquartzite
5) Syenite
6) Chert
7) Indeterminate

Metavolcanic Stone

Metavolcanic stone refers to a class of metamorphosed igneous rock that includes rhyolitic flows, rhyolitic tuffs, and greenstones (metabasalt). Metavolcanic stone occurs naturally in the Piedmont and may be found in cobble form within the bedload of some Coastal Plain rivers or more commonly from large natural outcrops within the North Carolina Slate Belt (Daniel and Butler 1996; Steponaitis et al. 2006).

Quartz

Vein quartz outcrops throughout the Piedmont as precipitated silica within the fracture planes of the underlying bedrock. This stone usually has a milky white or translucent appearance (Novick 1978:433). In the Piedmont and Coastal Plain stream rounded gravels of quartz also provided an easy and compact stone source (House and Wogaman 1978:53). Both quartz and quartzite are present in cobble form along the Tar River, particularly in Edgecombe County—west of Tarboro, North Carolina. At sizes below class 2, quartz and quartzite are virtually indistinguishable.

Quartzite

A metamorphic rock composed of at least 80 percent quartz and formed from interlocking quartz grains. Heat and pressure from metamorphism deforms the individual quartz grains and cements them together along grain boundaries (Novick 1978:431). Quartzite cobbles are abundant along sections of the Tar River, particularly near Tarboro, North Carolina, where rounded stream-cobbles of quartzite line the riverbed. This material is the dominant lithic raw material used by both Archaic and Woodland hunter-gatherers within the study area of Pitt and Edgecombe Counties, North Carolina (Moore 2009).

Orthoquartzite

This variety of stone is composed of quartz and sand grains that have been cemented together by silica (Novick 1978:433; Upchruch 1984). Although, outcrops of orthoquartzite are known in South Carolina from the lower Santee River (Charles 1981:15; Anderson et al. 1982:120-122) and from within the Savannah River Valley (Goodyear and Charles 1984:116), no quarries are known to exist in North Carolina.

Syenite

Syenite is an igneous/plutonic rock that is similar mineralogically to granite but lacks quartz silica (Chesterman and Lowe 1978). Syenite is considered an intrusive rock and may be found associated with dikes or along the periphery of large plutonic granite deposits (Chesterman and Lowe 1978). Although flaking quality of this rock is extremely poor, varieties of syenite are fairly common in archaeological assemblages along the Tar River with both debitage and some worked tool fragments and bifaces. Many examples of this material have a feldspar groundmass with some biotite, hornblende dark minerals and occasionally sporadic quartz phenocrysts.

Chert

Chert is fine-grained microcrystalline or cryptocrystalline silica or quartz and often forms as a precipitate within carbonate deposits such as limestone or marl (American Geological Institute 1962; Novick 1978). Trace amounts of chert debitage were found at sites in the study area. Some of the chert identified is likely from small worked pieces of petrified wood. Chert artifacts found in North Carolina likely had their origin out of state. Several examples of worked pieces of silicified or petrified wood have been found during excavations at the Barber Creek Site and were previously identified as chert (Moore 2009).

Stone Artifacts

These artifacts are diagnostic of a specific cultural group or are recognizable as the primary products of stone-working activities (Moore 2009, McFadden 2009). These artifacts are presented in Table 4.0 and discussed below.

Table 4.0. Diagnostic Artifacts.

STP	Level	FS #	Type	Raw Material	Notes/Description
104	3	620	Biface	Quartz	Early Stage
97	3	610	Biface	Quartzite	Early Stage
33	4	351	Biface	Quartzite	Early Stage
73	4	499	Biface	Quartzite	Early Stage
112	4	653	Biface	Quartzite	Early Stage
98	5	588	Biface Fragment	Metavolcanic	2 pieces refit with no tip
82	4	533	Biface Fragment	Quartz	Distal Half
94	2	727	Biface Fragment	Quartzite	
86	4	726	Biface Fragment	Quartzite	
57	5	450	End Scraper	Metavolcanic	Rhyolite
45	5	417	End Scraper	Quartz	
107	4	664	Grinding Stone/Anvil	Indet	
64	3	465	Hammerstone	Indet	
53	3	368	Hammerstone	Quartz	
40	4	355	Hammerstone	Quartz	
46	4	393	Hammerstone	Quartz	
90	4	594	Hammerstone	Quartz	
101	5	633	Hammerstone	Quartz	
90	1	591	Hammerstone	Quartzite	
92	1	541	Hammerstone	Quartzite	
58	4	442	Hammerstone	Quartzite	
79	4	599	Hammerstone	Quartzite	
107	2	661	Point	Metavolcanic	Morrow Mountain
40	3	353	Point	Metavolcanic	Crude Guilford
64	3	464	Point	Metavolcanic	Crude Guilford
74	3	487	Point	Metavolcanic	Small Triangular, Clarksville
95	2	569	Point	Quartz	Crude Guilford
110	1	675	Point	Quartzite	Small Triangular, Clarksville
77	2	517	Point	Quartzite	Roanoke
108	2	670	Point	Quartzite	Small Triangular, Clarksville
23	3	298	Point	Quartzite	Morrow Mountain
46	3	391	Point Base	Metavolcanic	Small Notched, Serrated
40	4	356	Point Fragment	Quartz	Potential stem
101	3	631	Point Fragment	Quartzite	Ear or Shoulder
98	6	590	Point Tip	Indet	Probably metavolcanic
98	3	585	Point Tip	Quartzite	
102	3	640	Vessel Fragment	Steatite	

Bifaces

Figure 4. 1. Bifaces from Squire's Ridge. A) Quartz, B) Quartzite.

Five early-stage bifaces were recovered through shovel testing. These artifacts are distinguished by flaking along both surfaces to provide a usable, blade-like edge. Of these, four are quartzite and one is quartz. An additional four biface fragments were also recovered. One metavolcanic fragment consisted of two rejoined sections, but was missing the tip. A quartz biface fragment representing the distal half of an artifact was present in the collection. The final two biface fragments were made from quartzite.

End Scrapers

Two endscrapers were identified in the collection. The rhyolite endscraper exhibits steep unifacial retouch along both lateral edges and the bit suggesting that it was hafted. This endscraper has been created from a relatively large flake. Dr. Daniel (Personal Communication) suggests that this rhyolite is from the Uwharrie Mountains in the central piedmont of North Carolina. The quartz specimen is a small type 1 endscraper (Coe 1964:73-74) with portions of the cobble cortex present on the dorsal surface. The nature of the retouch and form of these artifacts suggests that they may be Early Archaic in age. This is consistent with their recovery from level 5 of shovel testing.

Figure 4. 2. Points and End Scrapers from Squire's Ridge. A) Guilford, B) Morrow Mountain, C) Roanoke, D) End Scrapers, E) Clarksville.

Points

Bifacially worked artifacts that are diagnostic of a specific cultural group are identified as points. Nine complete points were recovered through shovel testing and an additional five point fragments were identified in the collection.

Of three Guilford Lanceolate points recovered during shovel testing, two are crudely crafted from metavolcanic stone and one is crudely crafted from quartz. Guilford Lanceolate points are defined as relatively narrow and long bifaces that are thick in cross-section. They have straight, rounded, and concave base forms (Coe 1964:43). These points are considered diagnostic of the Middle Archaic in the North Carolina Coastal Plain.

Two Morrow Mountain points are present in the assemblage; one is made from metavolcanic stone and the other is crafted from quartzite. Coe (1964:37) initially defined two varieties of Morrow Mountain points. Morrow Mountain I points are typically defined as small blades with a short pointed stem and II are typically defined as long, narrow blades with long, tapered stems in Coe (1964:37). While both types are diagnostic of the Middle Archaic, Coe (1964:37) proposed that Morrow Mountain I points predated Morrow Mountain II points. It has been suggested that these two forms are one type that exists in different stages of use and retouch (Cable 1982; Daniel 2010) and are defined as a single type in this analysis.

A single quartzite point has been identified as a Roanoke triangular point. Roanoke triangular points are defined as large triangular points with slightly concave bases and sides (Coe 1964:110). These points are considered diagnostic of the Early Woodland in the North Carolina Coastal Plain.

One small metavolcanic, and two small quartzite triangular points were identified as a Clarksville points. Clarksville Small Triangular points are described by Coe (1964:112) as very small triangular points with equilateral sides. They are stated to be almost exclusively made from vein quartz. These points are considered diagnostic of the Middle and Late Woodland in the North Carolina Coastal Plain.

The five point fragments identified in the collection include a metavolcanic base possibly from a small notched point with a serrated blade, a quartz fragment identified as a potential stem, a quartzite fragment that represents either an ear or a shoulder, and two point tips, one of quartzite and one of an indeterminate raw material.

Hammerstones

Ten hammerstones are present in the assemblage. Hammerstones are typically associated with reductive processes of stone-working. Hammerstones in the assemblage are cobble and pebble-sized stones identified by the presence of pitting or striations that suggest use in stone working. Five were of quartz, four of quartzite, and one of an indeterminate raw material.

Figure 4. 3. Additional stone artifacts. A) Anvil or grinding stone, B) Sample of hammerstones from Squire's Ridge.

Other Stone Artifacts

One large round stone (Figure 4.3) of an indeterminate raw material with a flat, pitted surface that was used for grinding or as an anvil was recovered through shovel testing. In addition, a single soapstone sherd is part of the collection.

Cobbles and Pebbles

This category includes other, non-diagnostic, lithic artifact types: broken cobbles (*n*=27), unmodified cobbles (*n*=12), flaked cobbles (*n*=7), cobble fragments (*n*=20), pebbles (*n*=58) (one of which appears to have been broken through use), and tabular fragments (*n*=20). Each of the primary raw material types (quartz, syenite, quartzite, metavolcanic, orthoquartzite, and indeterminate) are represented by artifacts from one or more of these categories. Data relating to cobbles and pebbles is provided in Table 4.1.

Water worn cobbles occurred in various forms in the assemblage. Twelve unmodified cobbles were recovered in the shovel tests and although no clear evidence of use could be detected on them, they are still identified as artifacts because it is assumed they were brought to the site by its inhabitants from the nearby Tar River. Cobble stone types include syenite (*n*=1), quartz (*n*=2), and indeterminate (*n*=9) stone. A total of 58 pebbles were included as artifacts for the same reason as unmodified cobbles, they are not natural to the depositional environment. Pebbles represented quartz (*n*=7) and indeterminate (*n*=51) stone types. Additionally, 27 broken cobbles, characterized by a non-natural break that is the result of stone working activities but no flaking, are part of the assemblage. Raw materials include quartz (*n*=13), quartzite (*n*=10), metavolcanic (*n*=3), and orthoquartzite (*n*=1) stone. Cobble fragments are cobble portions with definite flaking that have not been finished into tools. Twenty cobble fragments include quartz (*n*=6), quartzite (*n*=13), and metavolcanic (*n*=1) stone. Seven mostly intact, but flaked cobbles are also present in the assemblage including quartz (*n*=2), quartzite (*n*=4), and indeterminate (*n*=1) stone types. The relative abundance of quartz and quartzite match well with the high percentages of quartz and quartzite in the debitage. Finally, fifteen tabular fragments—identified as relatively thin, flat, irregularly shaped pieces of stone that show evidence of use—were recovered. All of these tabular fragments consist of syenite.

Table 4.1. Cobble, pebble, and tabular fragment frequencies by raw material and level.

Raw Material	Artifact Type	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6		Totals	
		n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Quartz															
	Broken Cobble	-	-	1	33.3	4	50	6	54.5	2	28.6	-	-	13	43.3
	Unmodified Cobble	-	-	-	-	-	-	2	18.2	-	-	-	-	2	6.7
	Cobble Flaked	-	-	-	-	-	-	-	-	2	28.6	-	-	2	6.7
	Cobble Fragment	1	100	-	-	3	37.5	1	9.1	1	14.3	-	-	6	20
	Pebble*	-	-	2	66.7	1	12.5	2	18.2	2	28.6	-	-	7	23.3
	Totals	1	100	3	100	8	100	11	100	7	100	-	-	30	100
Quartzite															
	Broken Cobble	2	66.7	2	66.7	4	50	1	12.5	1	20	-	-	10	37
	Cobble Flaked	-	-	1	33.3	-	-	2	25	1	20	-	-	4	14.8
	Cobble Fragment	1	33.3	-	-	4	50	5	62.5	3	60	-	-	13	48.1
	Totals	3	100	3	100	8	100	8	100	5	100	-	-	27	100
Metavolcanic															
	Broken Cobble	1	50	-	-	2	66.7	-	-	-	-	-	-	3	60
	Cobble Fragment	1	50	-	-	-	-	-	-	-	-	-	-	1	20
	Tabular Fragment	-	-	-	-	1	33.3	-	-	-	-	-	-	1	20
	Totals	2	100	-	-	3	100	-	-	-	-	-	-	5	100
Syenite															
	Unmodified Cobble	-	-	-	-	1	12.5	-	-	-	-	-	-	1	6.3
	Tabular Fragment	-	-	4	100	7	87.2	4	100	-	-	-	-	15	93.8
	Totals	-	-	4	100	8	100	4	100	-	-	-	-	16	100
Orthoquartzite															
	Broken Cobble	-	-	-	-	1	100	-	-	-	-	-	-	1	100
	Totals	-	-	-	-	1	100	-	-	-	-	-	-	1	100
Indeterminate															
	Unmodified Cobble	-	-	1		1		5		2		-	-	9	13.8
	Cobble Flaked	-	-	-	-	-	-	1		-	-	-	-	1	1.5
	Pebble	2	100	10		12		18		9		-	-	51	78.5
	Tabular Fragment	-	-	-	-	1		3		-	-	-	-	4	6.2
	Totals	2	100	11	100	14	100	27	100	11	100	-	-	65	100

***One quartz pebble in level 5 appears to have been broken through use.**

Figure 4. 4. Sample of flaked cobbles from Squire's Ridge.

Figure 4. 5. Sample of cobble fragments from Squire's Ridge.

Figure 4. 6. Sample of tabular fragments from Squire's Ridge.

Flakes

A total of 4853 artifacts recovered through shovel testing were identified as flaking debris resulting from stone working. Quartz and quartzite accounted for approximately 75% of flakes found on the site, metavolcanic accounted for approximately 21%, and orthoquartzite, syenite, and indeterminate raw materials accounted for approximately 4% of the total flakes excavated during shovel testing (Table 2.2). In general, those flakes classified as Grade 1 or Grade 2 appear to be from the early stages of reduction activities while those of Grade 3 and Grade 4 may be products of late stage reduction activities, secondary retouch, or shatter.

The presence or absence of cortex was also noted during analysis to further provide evidence for flake placement in the stage of reduction. Of the 4853 flakes identified, 656 were noted as having cortex present on their surface and 4197 did not have cortex present on their surface. These frequencies by size and raw material are available in Tables D.1 and D.2. Tables D.3 and 4.2 provide frequencies by size and raw material and represent the totals of these flake counts without regard for the presence or absence of cortex. No pattern was evident through time for a change in favored raw material for stone working.

Table 4.2. Total flake frequencies by raw material and level.

Total Flakes	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6		Totals	
	n	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Quartz	46	29.5	197	30	447	29.3	389	24.3	203	24.5	20	25.3	1302	26.8
Quartzite	67	42.9	223	33.9	717	46.9	852	53.2	456	54.9	40	50.6	2355	48.5
Orthoquartzite	1	0.6	5	0.8	25	1.6	34	2.1	19	2.3	2	2.5	86	1.8
Metavolcanic	37	23.7	215	32.7	311	20.4	284	17.7	144	17.3	17	21.5	1008	20.8
Syenite	3	1.9	8	1.2	23	1.5	30	1.9	5	0.6	-	-	69	1.4
Indeterminate	2	1.3	9	1.4	5	0.3	14	0.9	3	0.4	-	-	33	0.7
Totals	156	100	657	100	1528	100	1603	100	830	100	79	100	4853	100

Ceramics

The ceramic analysis focused on classifying pottery sherds by series. A total of 192 sherds were recovered in the shovel tests. Of those, 79 were classified according to series (Table 4.5). Ceramics were classified according to established types for the region (Herbert and Mathis 1996; Phelps 1983; South 1976). Four ceramic types and an indeterminate category were recognized through this study.

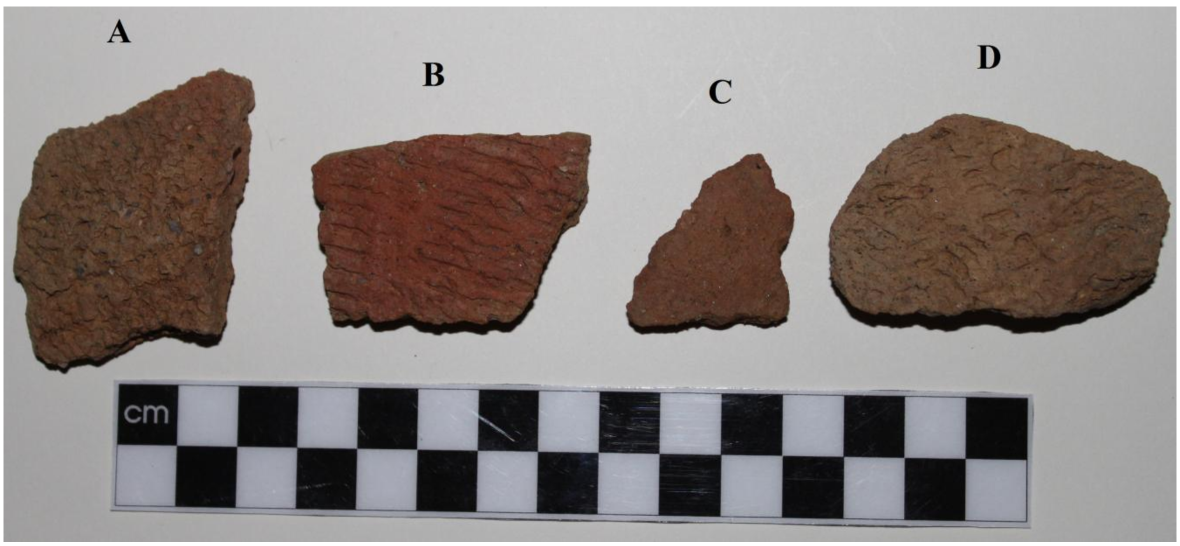

Figure 4. 7. Deep Creek sherds from Squire's Ridge showing surface treatments. A) Net, B) Cord, C) Plain, D) Fabric.

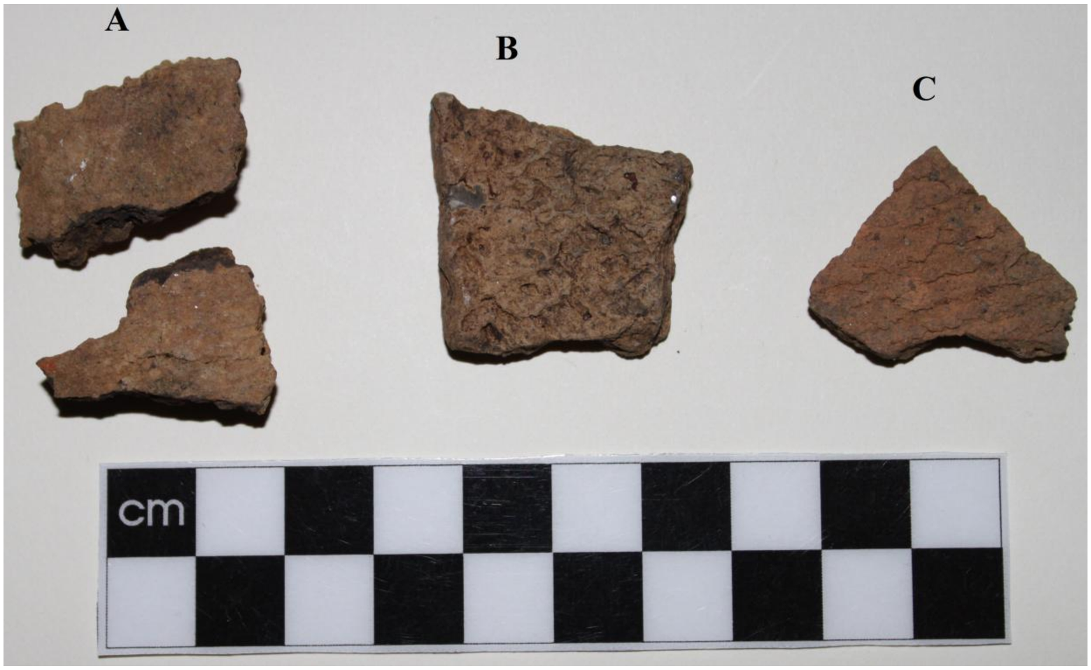

Figure 4. 8. Hanover sherds from Squire's Ridge showing surface treatments. A) Plain, B) Fabric, C) Cord.

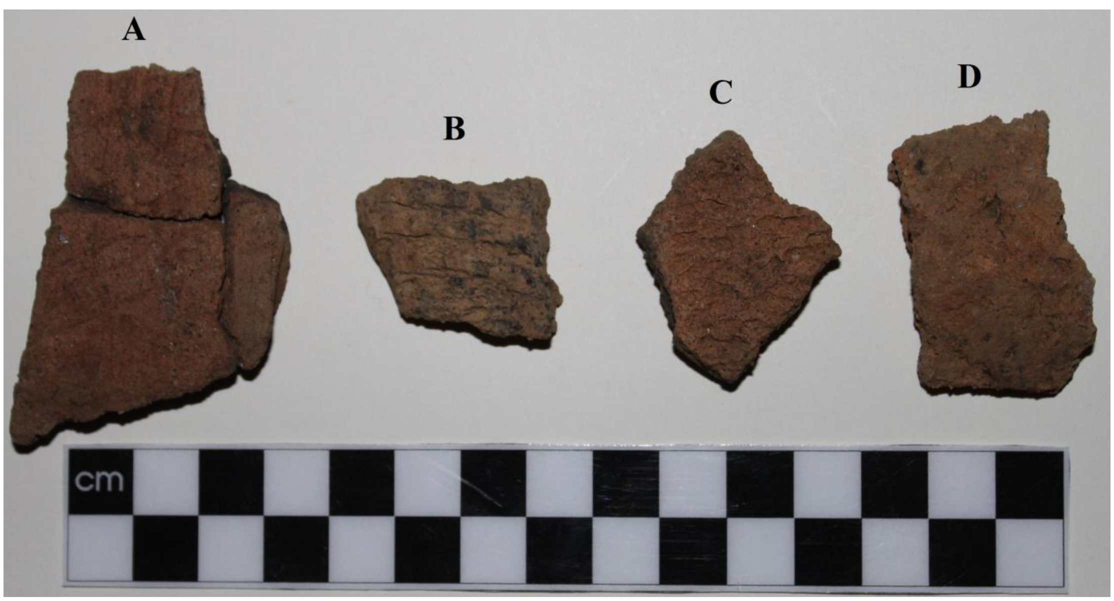

Figure 4. 9. Mount Pleasant sherds from Squire's Ridge showing surface treatments. A) Incised, B) Cord, C) Fabric, D) Plain.

Figure 4. 10. Unidentified granule tempered sherds from Squire's Ridge showing surface treatments. A) Incised, B) Fabric, C) Plain, D) Cord.

The Deep Creek type represents the Early Woodland ceramic type and is represented by 32 sherds. Middle Woodland types include Hanover (*n*=8) and Mount Pleasant (*n*=24). A fourth type could not be identified with any recognized typologies for the region and is defined as an unidentified granule tempered ceramic with a low abundance of granule or pebble-sized temper and a compact, sandy clay paste. This unidentified granule tempered type is represented by 15 sherds, 8 (53.3%) of those have a cord surface treatment, 4 (26.7%) have a fabric surface treatment, 1 (6.7%) has been incised, and 2 (13.3%) appear to be plain or smoothed. Sherds of Grade 3 (91) and Grade 4 (1) represent 81.4% of the 113 non-classified, indeterminate sherds. Data about surface treatments is presented in Table 4.3, and the distribution of indeterminate sherds by size can be seen in Table D.5.

Table 4.3. Ceramic sherd frequencies by type and surface treatment.

Type	Surface Treatment		Totals n	Totals %
Unidentified Sand Tempered				
	Cord		8	53.3
	Fabric		4	26.7
	Incised		1	6.7
	Plain		2	13.3
		Totals	15	100
Deep Creek				
	Cord		15	46.9
	Fabric		10	31.3
	Net		5	15.6
	Plain		2	6.3
		Totals	32	100
Hanover				
	Cord		2	25
	Fabric		4	50
	Plain		2	25
		Totals	8	100
Mount Pleasant				
	Cord		5	20.8
	Fabric		4	16.7
	Incised		6	25
	Plain		9	37.5
		Totals	24	100

Table 4.4. Ceramic frequencies by type and level.

Level	Type		Totals	
			n	%
Level 1				
	Unidentified Sand Tempered		7	9.2
	Deep Creek		10	13.2
	Hanover		3	3.9
	Mt. Pleasant		12	15.8
	Indeterminate		44	57.9
		Totals	76	100
Level 2				
	Unidentified Sand Tempered		6	6.7
	Deep Creek		19	21.1
	Hanover		5	5.6
	Mt. Pleasant		6	6.7
	Indeterminate		54	60
		Totals	90	100
Level 3				
	Unidentified Sand Tempered		2	12.5
	Deep Creek		2	12.5
	Hanover		-	-
	Mt. Pleasant		2	12.5
	Indeterminate		10	62.5
		Totals	16	100
Level 4				
	Unidentified Sand Tempered		-	-
	Deep Creek		1	16.7
	Hanover		-	-
	Mt. Pleasant		3	50
	Indeterminate		2	33.3
		Totals	6	100
Level 5				
	Unidentified Sand Tempered		-	-
	Deep Creek		-	-
	Hanover		-	-
	Mt. Pleasant		-	-
	Indeterminate		3	100
		Totals	3	100
Level 6				
	Unidentified Sand Tempered		-	-
	Deep Creek		-	-
	Hanover		-	-
	Mt. Pleasant		1	100
	Indeterminate		-	-
		Totals	1	100

Table 4.5. Ceramic frequencies by type.

Type	Totals	
	n	%
Unidentified Sand Tempered	15	7.8
Deep Creek	32	17
Hanover	8	4.2
Mt. Pleasant	24	13
Indeterminate	113	59
Totals	192	100

Table 4.4 shows the distribution of sherd types by level. As expected, the vast majority of sherds (*n*=166, 86.4%) were recovered from the levels 1 and 2; only a minority of sherds (*n*=26, 13.5%) were recovered below level 2. The ceramics document the presence of a Woodland component in the upper levels of the site. The presence of a few ceramics in the lower levels may be the result of bioturbation or may reflect the difficulty of keeping provenience while digging deep shovel tests. Interestingly, the level data also suggests a stratigraphic separation between Deep Creek and Mount Pleasant sherds. Although artifact frequencies are low, Deep Creek sherd frequencies decrease from level 2 (*n*=19, 21.1%) to level 1 (*n*=10, 13.2%) while Mount Pleasant sherd increase from level 2 (*n*=6, 6.7%) to level 1 (*n*=12, 15.8%).

Miscellaneous Materials

This is a residual category that primarily includes plant and animal remains (Table 4.6). Animal bone fragments, both burned and unburned, were present in all levels and presumably represent food remains. What appears to be nut shell was recovered from levels 3 and 4 and could be archaeological in nature. Charcoal was also present in all levels. Finally, a single fossil, a few pieces of what appear to be petrified wood, and some ochre were found in various excavation levels.

Historic Artifacts

Two types of historic artifact were recovered during the shovel testing. These include glass and gun casings and were recovered exclusively from levels 1 and 2.

Figure 4. 11. Sample of petrified wood from Squire's Ridge.

Table 4.6. Shovel tests positive for the presence of miscellaneous artifacts by level.

Artifact Type	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6	
	n	**%***	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Bone	3	2.6	15	13.2	13	11.4	11	9.6	6	5.3	1	0.9
Burnt Bone	-	-	-	-	1	0.9	-	-	-	-	-	-
Burnt Nut	-	-	-	-	2	1.8	4	3.5	2	1.8	-	-
Charcoal	3	2.6	14	12.3	20	17.5	11	9.6	12	10.5	1	0.9
Fossil	-	-	-	-	-	-	-	-	1	0.9	-	-
Glass	1	0.9	1	0.9	-	-	-	-	-	-	-	-
Gun Casing	2	1.8	-	-	-	-	-	-	-	-	-	-
Ocher	1	0.9	1	0.9	2	1.8	1	0.9	1	0.9	-	-
Petrified Wood	1	0.9	-	-	1	0.9	2	1.8	1	0.9	-	-

***Percent of 114 total shovel test pits.**

Surface Finds

Finds from a single surface collection were analyzed as part of this study. These artifacts do not appear in any of the total counts for the site and will not be mapped as part of the spatial analysis of the site. They are presented in Table 4.7.

Table 4.7. Surface Artifacts (FS #250).

Artifact Type	Size Class	Type	Raw Material	Cortex	No Cortex	Totals	Notes/Description
Flakes							
	2	Flake	Quartz	2	-	2	
	2	Flake	Quartzite	-	1	1	
	3	Flake	Metavolcanic	-	1	1	
	3	Flake	Quartz	-	1	1	
	3	Flake	Quartzite	-	5	5	
Cobbles/Pebbles							
	1	Cobble Fragment	Quartz	1	-	1	
Miscellaneous							
	3	Gun Casing		-	-	1	357 Magnum - Federal

CHAPTER 5: SPATIAL ANALYSIS

Methodology

The computer program Golden Software SURFER 8 (SURFER) was used to conduct the spatial analyses. All mapping was done as contours using the Kriging method. Kriging is a geostatistical gridding method that produces visually appealing maps from irregularly spaced data (Cressie 1991). Kriging illustrates data patterns such that high points are connected rather than isolated by bull's-eye type contours by interpolating unobserved information using known data points. The maps produced here essentially depict artifact densities across the site as patterns rather than absolute quantities. This allows patterns in artifact density to be predicted without fully excavating the site. Several maps were produced including maps of total artifact densities as well as individual maps representing the distributions of ceramics and lithics across the site. These maps provided visual representations of spatial patterning in artifact distributions. Visual comparisons were made with the existing artifact density maps for Barber Creek (Daniel et al. 2008).

Discussion

In this chapter, I discuss and interpret the patterns of artifact distribution across the site. A contour map of Squire's Ridge was created for data overlay (Figure 5.1). The locations of all 114 shovel test pits are provided in Table D.7 and illustrated in Figure 5.2. All other contour maps created in this section have shovel tests pit locations overlaid on the image.

Of 114 shovel test pits dug along the ridge, 100 contained artifacts. Total artifact counts range from 0 to 310 per shovel test with a median of 35 and a mode of 3. Several patterns are present in the shovel test data. First, although shovel tests were excavated in rather thick levels, a stratigraphic pattern emerged across the ridge: ceramics were primarily present in the upper two levels of each shovel test while stone artifacts with little to no pottery were present below that depth.

Second, with respect to site boundaries, the distributions of total artifact counts per shovel test suggest that site limits are largely isomorphic with the ridge covering approximately 2.85 hectare (ha). Artifacts cover the entire ridge with the greatest densities oriented along the center of the site (Figure 5.3). Shovel tests lacking artifacts or with very low artifact counts along the ridge slopes suggest the east and west boundaries of the site have been identified. The narrow toe of the ridge overlooking the floodplain probably marks the northern edge of the site although no shovel tests were placed in the floodplain to confirm this notion. The southern limits of the site are somewhat less certain since shovel testing was limited by property boundaries. Nevertheless, artifact counts tend to decline towards the southern edge of the ridge as does the elevation of the sand ridge. It is assumed by Daniel (2011, personal communication) that the site does not extend much further to the south. In short, it appears that the vast majority of the site was shovel tested.

As such, artifacts are clustered along the ridge crest with the highest artifact densities concentrated in perhaps seven "hotspots." The greatest artifact densities are in the center and northern portions of the ridge. This can be seen in Figure 5.3.

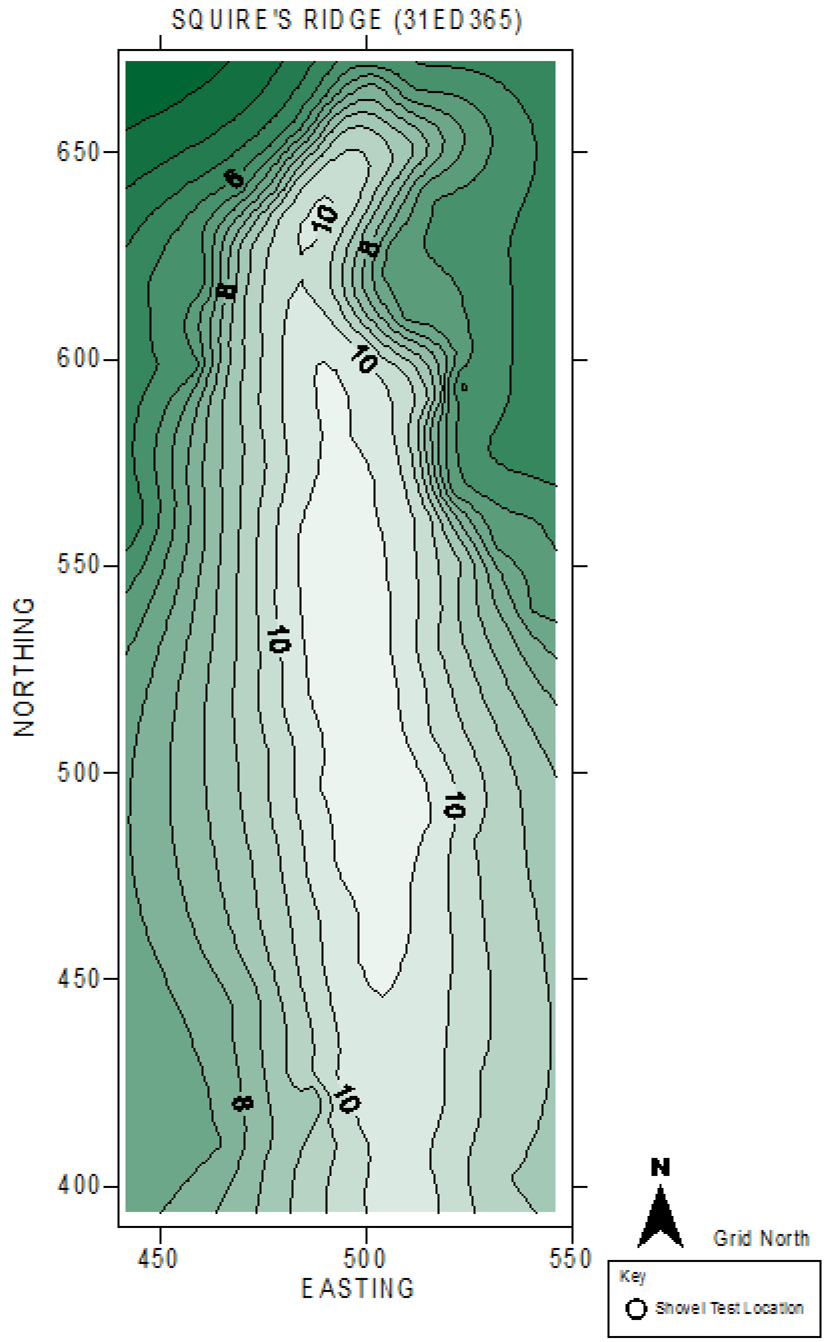

Figure 5. 1. Contour map of Squire's Ridge. (Artifact interval = 0.5, except first interval = 4).

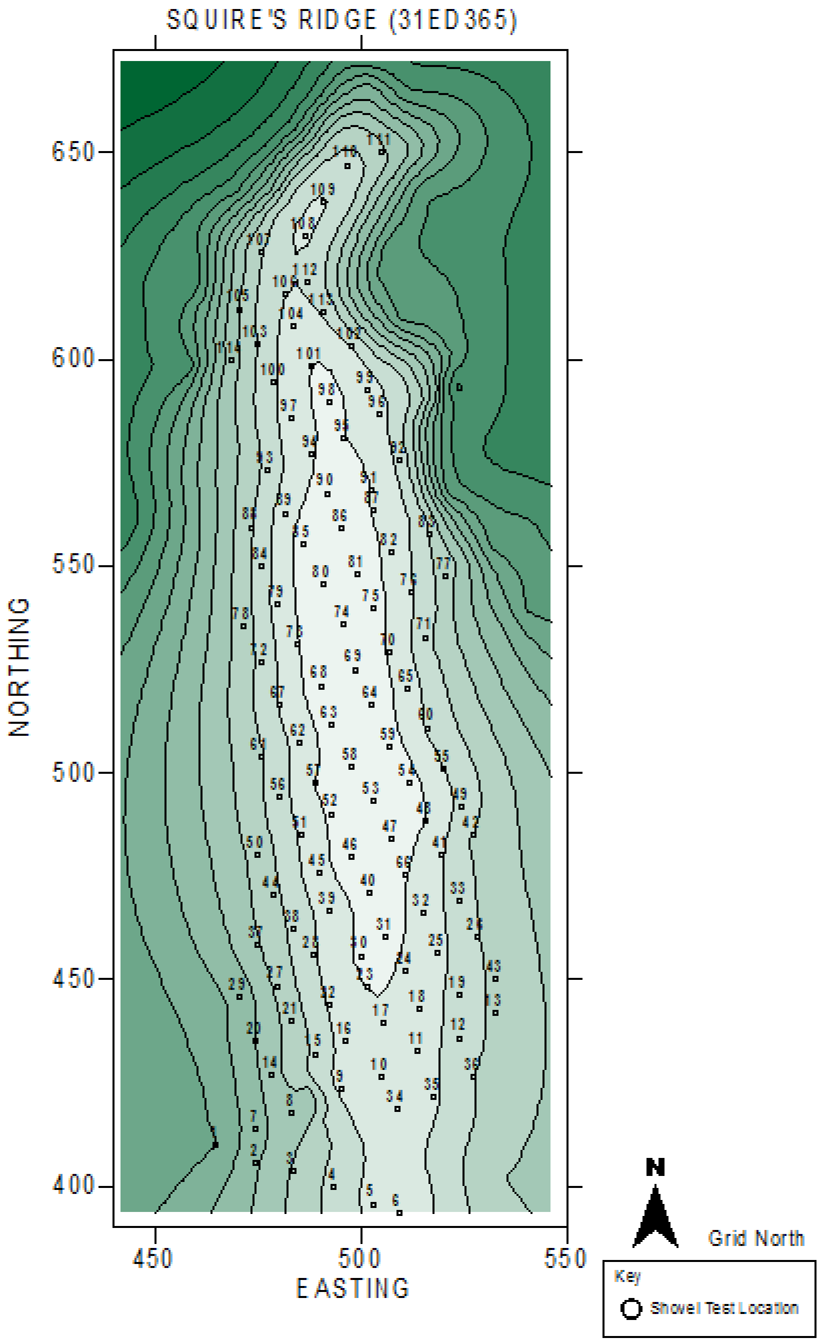

Figure 5. 2. Shovel test locations at Squire's Ridge.

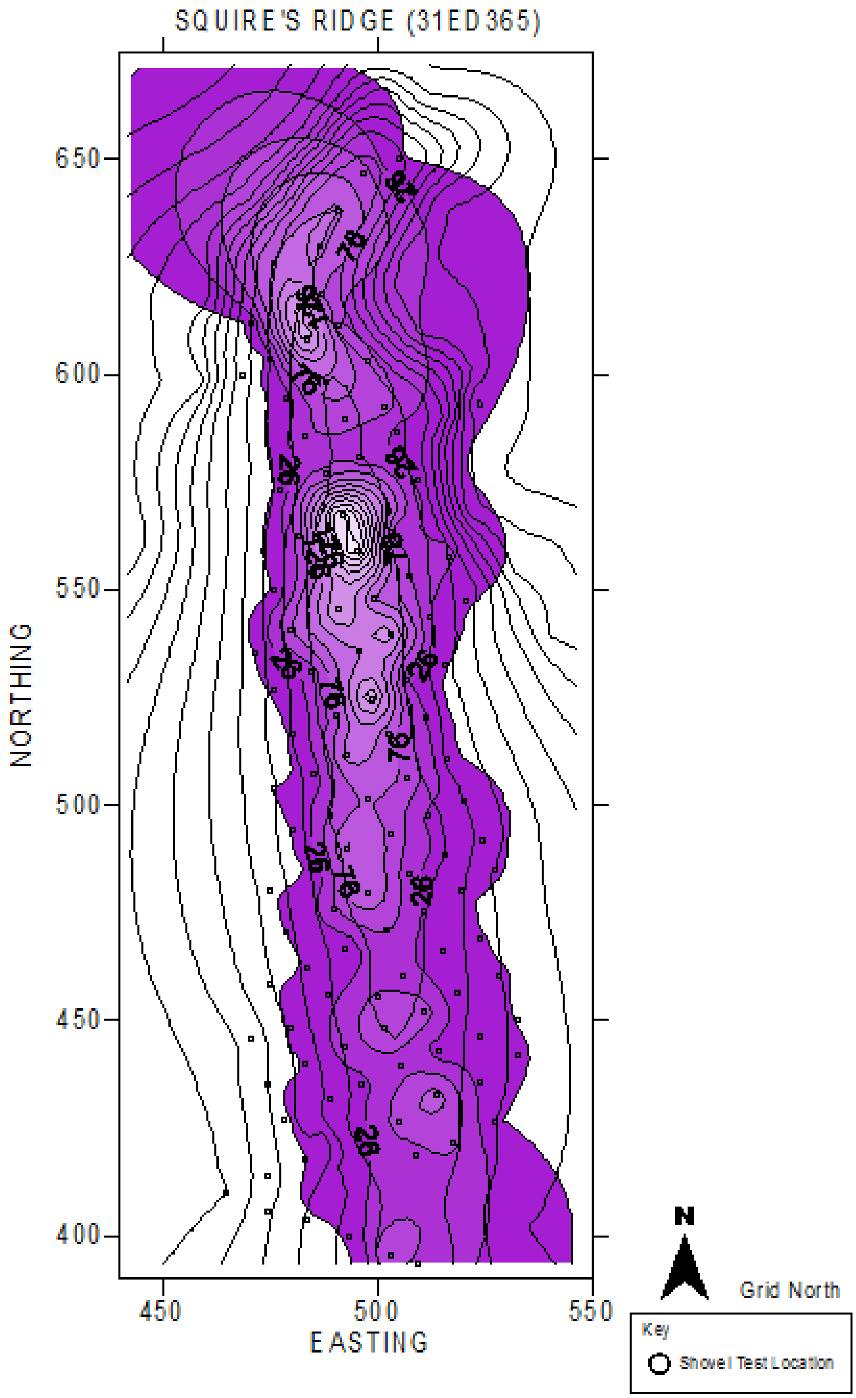

Figure 5. 3. Total artifact density at Squire's Ridge. (Artifact interval = 25, except first interval = 1).

Third, potential differences in the spatial patterning of the Archaic and Woodland components were also explored. With regard to the Woodland component, an interesting pattern emerged with respect to the presence of ceramic sherds recovered from Squire's Ridge (Figure 5.4). Ceramics were concentrated in the northern half of the site; virtually no ceramics were recovered from the southern portion of the ridge. Whatever activities the ceramic distributions may represent, it would appear they were spatially limited to the northern portion of the ridge where three "hotspots" of ceramic sherds are evident.

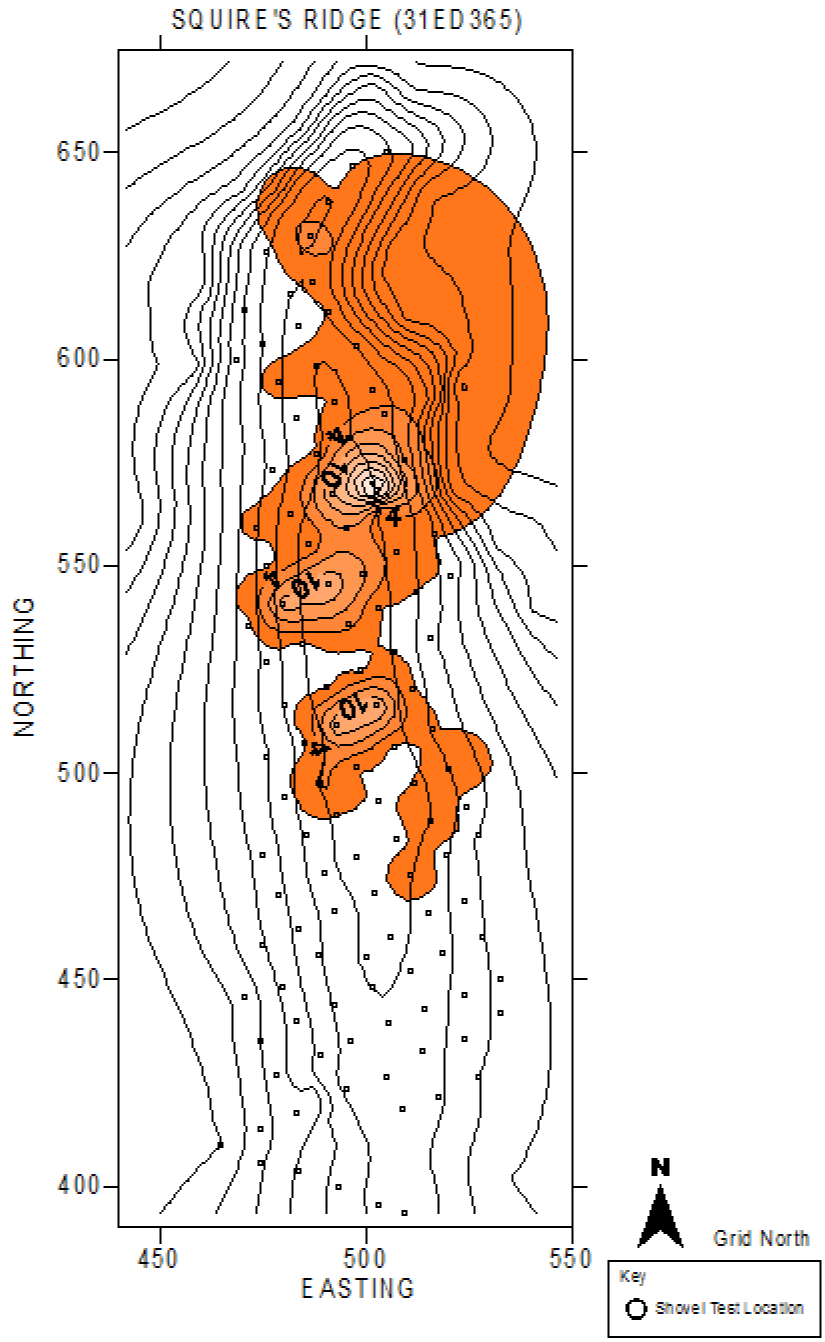

Figure 5. 4. Ceramic sherd density at Squire's Ridge. (Artifact interval = 3, except first interval = 1).

Additional differences in intrasite spatial patterning between the Archaic and Woodland components were explored through a comparison of Level 5 (Figure 5.5), used as a proxy for the larger Archaic component, and Level 2 (Figure 5.6), used as a proxy for the larger Woodland component. Four primary "hotspots" can be seen in the Archaic map, all centered along the crest of the ridge. The location with the greatest artifact density in the Archaic appears to be near the exact center of the ridge. The Woodland map reveals approximately eight "hotspots" along the crest of the ridge. These run the full length of the ridge, with the highest artifact distribution in the center of and towards the northern portion of the ridge. The meaning of these differences in spatial patterning is unclear; however, they do indicate use of the ridge throughout the Archaic and Woodland Periods.

It is perhaps premature to speculate in depth on the significance of these "hotspots," but some interpretation should be suggested. These most likely represent specific activity sites along the ridge such as campsites, stone-working centers, food preparation stations, or refuse piles. If the artifacts recovered from these "hotspots" are specialized, this may provide support to this thesis. The spatially-limited nature of the ceramics recovered during shovel testing also supports this idea. The differences in the spatial patterning of artifacts across the site through time suggests a change in the nature of the use of the dune or changes in the physical form and ecological properties of the ridge.

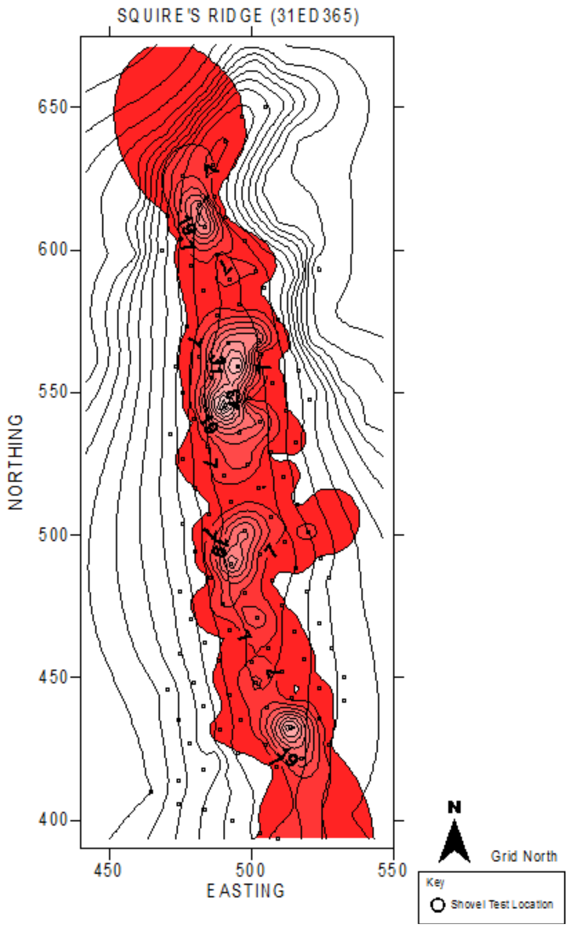

Figure 5. 5. Representation of Archaic period artifact density at Squire's Ridge. (Artifact interval = 6, except first interval = 1).

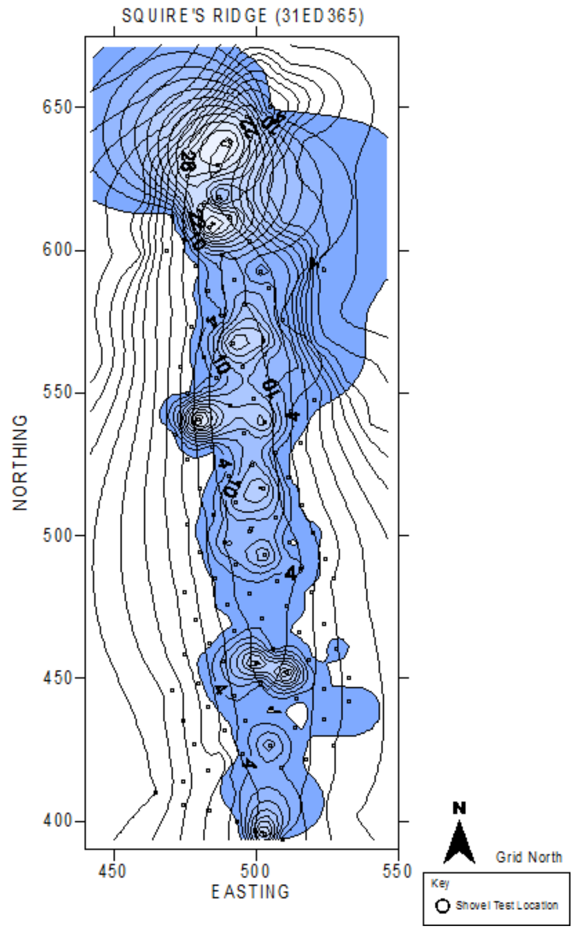

Figure 5. 6. Representation of Woodland period artifact density at Squire's Ridge. (Artifact interval = 3, except first interval = 1).

CHAPTER 6: CONCLUSIONS

The goal of this thesis was to identify the archaeological components at Squire's Ridge and to explore any potential intrasite spatial patterning that might exist among those components. Specifically, two research questions were addressed through the analyses. First, what archaeological components are present at Squire's Ridge and what implications exist for understanding Coastal Plain chronology and typology? Second, what is the spatial patterning across the site? This chapter will present the conclusions of my research by addressing each of those questions. Finally, comparisons will be drawn with the Barber Creek site also located along the Tar River.

With respect to the first research question, both Archaic and Woodland components were identified at the site. In particular, the presence of Guilford and Morrow Mountain points indicated the presence of a Middle Archaic component. This is consistent with the results of Moore's (2009) test pit excavations which appear to have identified a significant Middle Archaic component. An Early Archaic component was also identified in Moore's (2009) excavations as represented by the presence of a Palmer Corner-Notched point. Although no diagnostic Early Archaic points were discovered from the shovel testing, two endscrapers were recovered that are likely associated with the Early Archaic component. Other diagnostic artifacts recovered in the shovel testing include a small triangular point and ceramics associated with a Woodland occupation. In particular, the presence of Deep Creek, Hanover, and Mount Pleasant ceramic types indicate the presence of Early – Middle Woodland components at the site. The presence of Woodland Period ceramics in the upper levels of the shovel tests is also consistent with Moore's (2009) test pit results. In short, the shovel tests excavated at Squire's Ridge suggest the stratified Archaic and Woodland remains identified by Moore's (2009) test units are generally present across the sand ridge. Moreover, Guilford, Morrow Mountain, and Deep Creek components appear to be strongly represented at Squire's Ridge and additional excavations at the site has the potential to increase our understanding of the artifact assemblages for those periods in the Coastal Plain of North Carolina.

With respect to the second research question, the abundance of artifacts recovered through shovel testing at Squire's Ridge (31ED365) suggests a heavily utilized sand ridge covering approximately 2.85 ha in size. Artifact densities across the site suggest that while there was considerable spatial overlap between the Archaic and Woodland components; the spatial clustering of ceramics suggests that Woodland activities reflected by the presence of ceramics were concentrated in the northern portion of the ridge. Moreover, spatial analyses indicate specific "hotspots" exist for both components across the ridge crest.

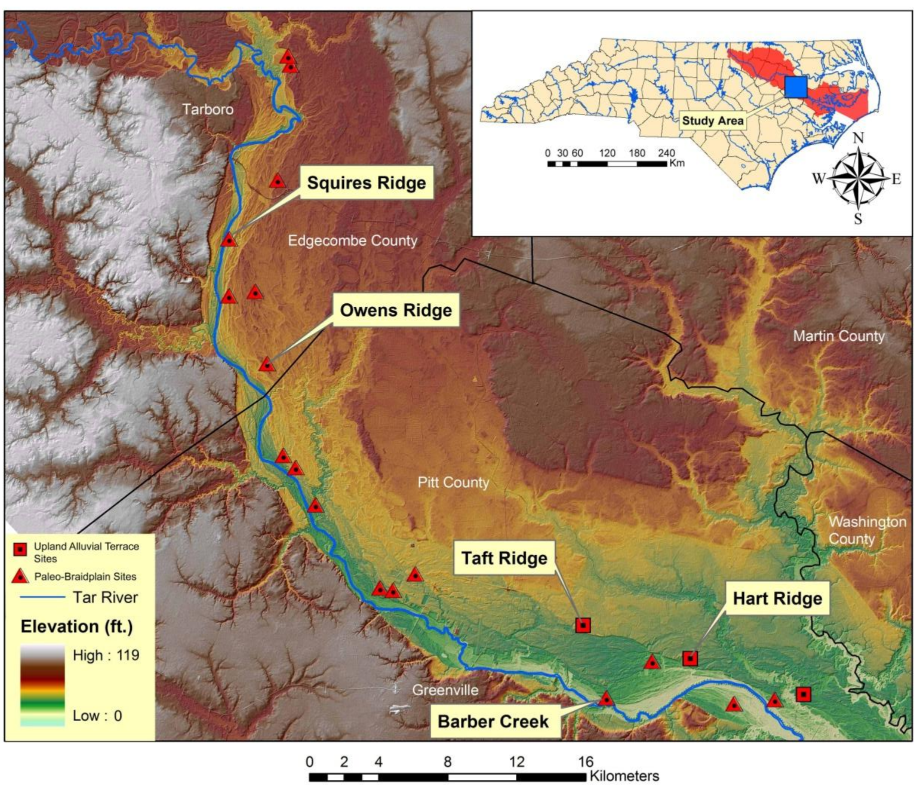

Figure 6. 1. Map showing the locations of Squire's Ridge and Barber Creek with elevations courtesy of Dr. Christopher Moore (Originally appeared in Moore 2009).

Comparisons with Barber Creek (31PT259)

Some final comments need to be made comparing the results of this work with similar research previously reported at Barber Creek (Daniel 2008, Potts 2004). Like Squire's Ridge, the Barber Creek site is relict dune located just down river in Pitt County. At Barber Creek, 94 shovel tests were completed during the summer 2000 field season. Of those shovel tests, 79 of the tests contained artifacts. Total artifact counts per shovel test ranged from 0 to 49 and revealed a median of 7 and a mode of 0, exhibiting significantly lower artifact densities than Squire's Ridge. Like Squire's Ridge, shovel tests revealed that the site boundaries were largely isomorphic with the ridge. Moreover, the spatial analyses indicate the presence of broad scale spatial patterning at both sites. At Barber Creek, the Archaic use of the site was spatially less extensive than the Woodland occupation, being confined primarily to the ridge crest. And while the Woodland component spatially overlaps the Archaic component, the Woodland component was concentrated along the southern edge of the ridge. This spatial patterning appears to contrast somewhat with the results at Squire's Ridge. That is, while considerable overlap exists with the spatial patterning of both components, ceramic clustering suggests that the Woodland component may have been concentrated at the northern end of the site. At this point it is unclear what significance, if any, these differences in spatial patterning may represent.

It does suggest, however, that both of these sites were heavily utilized during the Archaic and Woodland phases of the North Carolina Coastal Plain. The artifact density at Squire's Ridge is much greater than that at Barber Creek. The differences in the utilization of space along these ridges likely represent differences in the activities that occurred on their surfaces and suggest some differences in the physical and ecological make-up of the ridges during comparable periods of occupation. This could be further complicated by the area surrounding these ridges. Though both are located in close proximity to the Tar River, Barber Creek has a swampy region to the south that is not present at Squire's Ridge.

Significance of this Study

- This is the first large-scale analysis of artifacts recovered from the Squire's Ridge (31ED365) site and served to define site boundaries and suggest points of interest for future investigations.
- This is only the second stratified site (Squire's Ridge and Barber Creek) identified and excavated in the North Carolina Coastal Plain. This should provide new data for the creation of a chronology and culture-history specific to the Coastal Plain.
- Excavations at relict sand dunes in the Tar River Drainage support the conclusions of Christopher Moore (2009) that aeolian sand dunes were primary occupation sites in North Carolina during the Archaic and Woodland periods and can be identified through modern GIS technology and archaeological sampling through shovel testing.
- Analyses of artifacts in the North Carolina Coastal Plain have primarily focused on Woodland and historic components. The sites at Barber Creek and Squire's Ridge provide a wealth of artifacts from the Archaic period for study.
- The spatial analysis undertaken in Daniel et al. 2008 and the spatial analysis from this thesis provide the first data about the spatial patterning of occupations in the North Carolina Coastal Plain and will serve as the preliminary models for future studies and analysis.

Future Research

Additional work is needed examining inter-assemblage variability to better characterize the site functions of these locations. Future research at Squire's Ridge should attempt to define the nature of "hotspots" across the site. Further study is also needed to explore potential differences in the nature of site use through time. The ceramic artifacts recovered from the site will serve to further refine and test the Deep Creek, Hanover, and Mount Pleasant ceramic typologies for the North Carolina Coastal Plain. Whatever the outcome, it is clear that additional work at relict dune sites along the Tar River will greatly expand our understanding of the archaeology of the Coastal Plain of North Carolina.

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APPENDIX A: LITHIC ARTIFACT TYPES

- Cobble – Source stone size class 1 or above
    - Unmodified Cobble – Cobble that appears natural in origin
    - Broken Cobble – Cobble portion that has broken but has not been flaked
    - Flaked Cobble – Mostly complete cobble that has been flaked but not finished into a tool
    - Cobble Fragment – Cobble portion with definite flaking that has not been finished into a tool
- Pebble – Source stone below size class 1
    - Unmodified Pebble – Pebble that appears natural in origin
    - Abraded Pebble – Pebble that shows signs of use in grinding or scraping
    - Flaked Pebble – Pebble that has been flaked but not finished into a tool
    - Broken Pebble – Pebble portion that has broken but has not been flaked
- Crystal – Source stone of crystalline origin (i.e. Quartz crystal)
    - Unmodified Crystal – Crystal that appears natural in origin
    - Broken Crystal – Crystal portion that has broken but has not been flaked
    - Crystal Fragment – Crystal portion with definite flaking that has not been finished into a tool
- Tabular Stone – Source stone that is tabular in nature and is often of poor quality materials
    - Tabular Fragment – Portion of tabular rock with minimal or no evidence of flaking
- Core – A distinct stone nodule that shows the negative scars of removed flakes on multiple sides
    - Core Fragment – Non-cobble core chunk or fragment
- Flake – Intentional flake and shatter fragments from reduction
    - Utilized/Retouched Flake – Flake with signs of use-wear and/or retouched edge(s)
- Tool
    - Biface – Bifacially worked stone implement (i.e. flaked on two sides)
        - Biface Fragment – Fragment of a biface (non-projectile)

        - Point – A specific form of biface that is associated with a specific geographic region or cultural group
            - Diagnostic Point – Guilford, Morrow Mountain, Kirk, Palmer, etc
            - Indeterminate Point – Point whose identification is not definite
            - Point Fragment – Fragment of a finished projectile point
                - Point Tip – Fragment from the tip of a point
                - Point Base – Fragment from the base of a point
                - Point Ear/Shoulder – Fragment from the ear/shoulder of a point
    - Uniface – Unifacially worked stone implement (i.e. flaked on one side)
        - Uniface Fragment – Fragment of a uniface (non-projectile)
        - End Scraper – Formal type of unifacial scraper
    - Hammerstone – Pebble- or cobble-sized stone used in knapping
        - Broken Hammerstone – Fragment of a hammerstone that appears to have broken through use
    - Anvil/Grinding Stone – A stone used as a surface for grinding or knapping
        - Anvil/Grinding Stone Fragment – Broken section of stone with evidence for use as a grinding or knapping surface

APPENDIX B: CERAMIC TYPOLOGIES

Deep Creek Series Definition (Roberts 2011, Phelps 1983)

- Series Name: Deep Creek
- Types: Cord-Marked, Fabric-Impressed, Net-Impressed, Plain, and Simple-Stamped
- Temper: Medium to Very Coarse Sand with occasionally (20%) larger elements.
- Paste: Slightly friable somewhat compact fine sandy clay.
- Temper Abundance: An average 10-20% of the paste with occasional sherds <10% and some 20-40%.
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening.
- Range: Southern Virginia to South Carolina’s Coastal Regions.
- Texture: Sherds can be rough to somewhat smooth with varying levels of sandy feel.

Hanover Series Definition (South 1973, 1976)

- Series Name: Hanover
- Types: Cord-Marked, Fabric-Impressed, Plain, Incised, Punctuated
- Temper: Crushed sherds or clay pellets up to 6 mm
- Paste: Compact clay
- Temper Abundance: 25-50 % clay and up to 15% fine or medium sand
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening. Interior spaces may show evidence of scraping with a serrate-margin tool.
- Range: Southern coastal region of North Carolina; as far west as Robeson county and as far north as Pitt and Dare counties.
- Texture: Sherds are often lumpy with a smooth paste and potentially a chalky feel.

Unidentified Granule Tempered Series Definition

- Series Name: Unknown
- Types: Fabric-Impressed, Plain, Cord-Marked, Incised
- Temper: Occasional granule or pebble-sized inclusions
- Paste: Compact sandy clay
- Temper Abundance: Very low proportions of temper are evident
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening.
- Range: Unknown
- Texture: Sherds are smooth with a slight sandy feel.

Mount Pleasant Series Definition (Phelps 1983, Herbert 2003)

- Series Name: Mount Pleasant
- Types: Fabric-Impressed, Plain, Simple Stamped, Cord-Marked, Incised, Net-Impressed
- Temper: Fine to medium sand with occasional granule and pebble inclusions
- Paste: Sandy compact clay
- Temper Abundance: Temper abundance varies, but the type is defined by the presence of granule or pebble-sized inclusions.
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening.
- Range: As far north as Currituck County, associated with coastal North Carolina and inland along the Cape Fear River drainage.
- Texture: Surfaces can be rough to somewhat smooth with varying levels of sandy feel.

Surface Treatments (Rice 1987)

- Cord-Marked: Cord-wrapped paddle used to form and strengthen the surface.
- Fabric-Impressed: Fabric-wrapped paddle used to form and strengthen the surface.
- Incised: Surface decoration.
- Indeterminate: Unidentifiable surface treatment.
- Net-Impressed: Net-wrapped paddle used to form and strengthen the surface.
- Plain: Surface shows evidence of having been smoothed prior to firing. Some sherds in this category may have surface treatments that were eroded beyond identification.
- Punctated: Surface decoration.
- Simple Stamped: Carved paddle used to form and strengthen the surface, also a form of surface decoration.

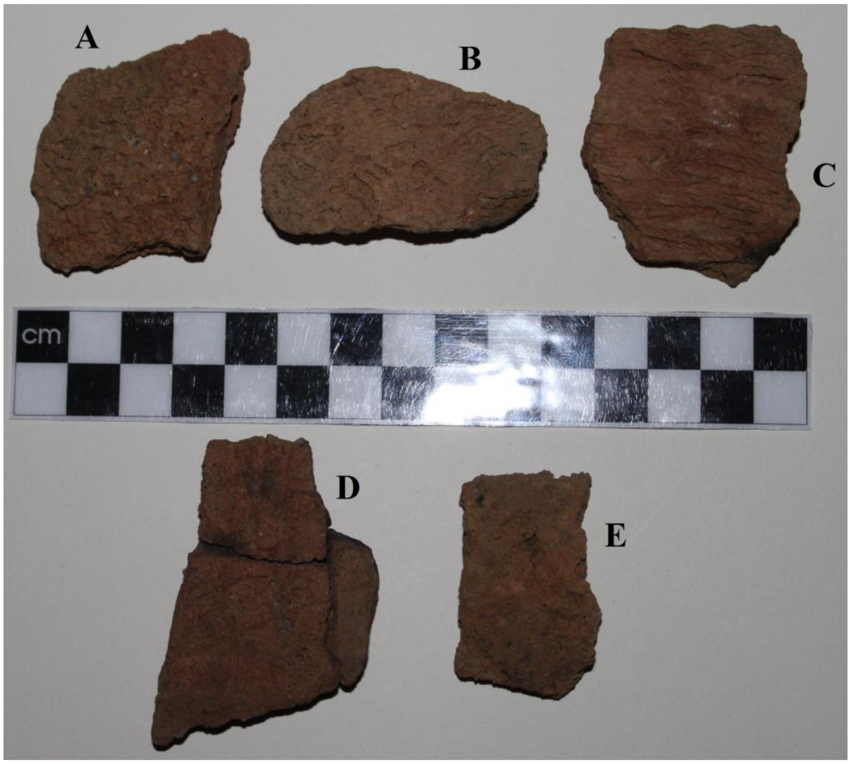

Figure C. 1. Examples of surface treatments on ceramics from Squire's Ridge. A) Deep Creek net, B) Deep Creek fabric, C) Unidentified granule tempered type cord, D) Mount Pleasant incised, E) Mount Pleasant plain.

APPENDIX C: MISCELLANEOUS TYPES

Historic Artifacts

- Glass – Siliceous material identified as a super cooled liquid containing flux, stabilizer, and colorant
- Gun Casing – Spent shell casing from a firearm

Other Miscellaneous Artifacts

- Bone – Any biological material identifiable as bone
    - Burnt Bone – Any bone that shows signs of fire damage
- Charcoal – Any biological material that shows signs of fire damage
    - Burnt Nut – Any charcoal identifiable as a fragment of nut
- Fossil – Any fossilized biological material
- Ocher – Fragment of hematite not natural to the landform's composition
- Petrified Wood – Petrified wood that shows no signs of flaking or use as a tool
- Shell – Any biological material identifiable as shell

APPENDIX D: ADDITIONAL DATA TABLES

Table D.1. Cortex flake frequency by size class, raw material, and level.

Size Grade	Raw Material	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6		Totals	
		n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Size 1															
	Quartz	-	-	-	-	2	66.7	-	-	-	-	-	-	2	20
	Quartzite	-	-	-	-	1	33.3	5	100	-	-	1	100	7	70
	Orthoquartzite	-	-	-	-	-	-	-	-	1	100	-	-	1	10
	Metavolcanic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Syenite	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indeterminate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Totals	-	-	-	-	3	100	5	100	1	100	1	100	10	100
Size 2															
	Quartz	2	28.6	1	6.3	10	17.9	6	8	4	11.1	1	25	24	12.4
	Quartzite	2	28.6	12	75	39	69.6	55	73.3	31	86.1	3	75	142	73.2
	Orthoquartzite	-	-	1	6.3	2	3.6	8	10.7	-	-	-	-	11	5.7
	Metavolcanic	1	14.3	2	12.5	3	5.4	5	6.7	-	-	-	-	11	5.7
	Syenite	1	14.3	-	-	2	3.6	1	1.3	-	-	-	-	4	2.1
	Indeterminate	1	14.3	-	-	-	-	-	-	1	2.8	-	-	2	1
	Totals	7	100	16	100	56	100	75	100	36	100	4	100	194	100
Size 3															
	Quartz	2	25	7	17.5	19	18.8	10	8.7	4	12.5	1	10	43	14.1
	Quartzite	5	62.5	27	67.5	75	74.3	87	75.7	25	78.1	9	90	228	74.5
	Orthoquartzite	1	12.5	1	2.5	1	1	4	3.5	-	-	-	-	7	2.3
	Metavolcanic	-	-	4	10	5	5	7	6.1	3	9.3	-	-	19	6.2
	Syenite	-	-	-	-	-	-	1	0.9	-	-	-	-	1	0.3
	Indeterminate	-	-	1	2.5	1	1	6	5.2	-	-	-	-	8	2.6
	Totals	8	100	40	100	101	100	115	100	32	100	10	100	306	100
Size 4															
	Quartz	3	60	2	25	3	7.9	10	14.5	4	19	-	-	22	15.1
	Quartzite	2	40	4	50	30	78.9	51	73.9	16	76.2	4	80	107	73.3
	Orthoquartzite	-	-	-	-	2	5.3	3	4.3	-	-	-	-	5	3.4
	Metavolcanic	-	-	2	25	3	7.9	5	7.2	1	4.8	1	20	12	8.2
	Syenite	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indeterminate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Totals	5	100	8	100	38	100	69	100	21	100	5	100	146	100

Table D.2. Nondecortication flake frequency by size class, raw material, and level.

Size Grade	Raw Material	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6		Totals	
		n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Size 1															
	Quartz	-	-	-	-	-	-	1	100	1	100	-	-	2	40
	Quartzite	-	-	-	-	1	33.3	-	-	-	-	-	-	1	20
	Orthoquartzite	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Metavolcanic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Syenite	-	-	-	-	2	66.7	-	-	-	-	-	-	2	40
	Indeterminate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Totals	-	-	-	-	3	100	1	100	1	100	-	-	5	100
Size 2															
	Quartz	2	22.2	12	37.5	18	29.5	12	20.3	13	35.1	-	-	57	28.4
	Quartzite	2	22.2	8	25	25	41	36	61	11	29.7	1	33.3	83	41.3
	Orthoquartzite	-	-	-	-	2	3.3	1	1.7	4	10.8	-	-	7	3.5
	Metavolcanic	4	44.4	4	12.5	13	21.3	6	10.2	6	16.2	2	66.7	35	17.4
	Syenite	1	11.1	6	18.8	3	4.9	4	6.8	2	5.4	-	-	16	8
	Indeterminate	-	-	2	6.3	-	-	-	-	1	2.7	-	-	3	1.5
	Totals	9	100	32	100	61	100	59	100	37	100	3	100	201	100
Size 3															
	Quartz	15	26.8	53	30.5	86	25.3	101	25.6	32	18.1	3	16.7	290	25
	Quartzite	25	44.6	61	35.1	164	48.2	213	53.9	106	59.9	9	50	578	49.8
	Orthoquartzite	-	-	3	1.7	12	3.5	11	2.8	7	4	1	5.6	34	2.9
	Metavolcanic	15	26.8	52	29.9	67	19.7	51	12.9	30	16.9	5	27.8	220	19
	Syenite	-	-	2	1.1	10	2.9	11	2.8	1	0.6	-	-	24	2.1
	Indeterminate	1	1.8	3	1.7	1	0.3	8	2	1	0.6	-	-	14	1.2
	Totals	56	100	174	100	340	100	395	100	177	100	18	100	1160	100
Size 4															
	Quartz	22	31	122	31.5	309	33.4	249	28.2	145	27.6	15	39.5	862	30.4
	Quartzite	31	43.7	111	28.7	382	41.3	405	45.8	267	50.9	13	34.2	1209	42.7
	Orthoquartzite	-	-	-	-	6	0.6	7	0.8	7	1.3	1	2.6	21	0.7
	Metavolcanic	17	23.9	151	39	220	23.8	210	23.8	104	19.8	9	23.7	711	25.1
	Syenite	1	1.4	-	-	6	0.6	13	1.5	2	0.4	-	-	22	0.8
	Indeterminate	-	-	3	0.8	3	0.3	-	-	-	-	-	-	6	0.2
	Totals	71	100	387	100	926	100	884	100	525	100	38	100	2831	100

Table D.3. Flake frequencies by size class, raw material, and level.

Size Grade	Raw Material		Level 1		Level 2		Level 3		Level 4		Level 5		Level 6		Totals	
			n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Size 1																
	Quartz		-	-	-	-	2	33.3	1	16.7	1	50	-	-	4	26.7
	Quartzite		-	-	-	-	2	33.3	5	83.3	-	-	1	100	8	53.3
	Orthoquartzite		-	-	-	-	-	-	-	-	1	50	-	-	1	6.7
	Metavolcanic		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Syenite		-	-	-	-	2	33.3	-	-	-	-	-	-	2	13.3
	Indeterminate		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Totals	-	-	-	-	6	100	6	100	2	100	1	100	15	100
Size 2																
	Quartz		4	25	13	27.1	28	23.9	18	13.4	17	23.3	1	14.3	81	20.5
	Quartzite		4	25	20	41.7	64	54.7	91	67.9	42	57.5	4	57.1	225	57
	Orthoquartzite		-	-	1	2.1	4	3.4	9	6.7	4	5.5	-	-	18	4.6
	Metavolcanic		5	31.3	6	12.5	16	13.7	11	8.2	6	8.2	2	28.6	46	11.6
	Syenite		2	12.5	6	12.5	5	4.3	5	3.7	2	2.7	-	-	20	5.1
	Indeterminate		1	6.3	2	4.2	-	-	-	-	2	2.7	-	-	5	1.3
		Totals	16	100	48	100	117	100	134	100	73	100	7	100	395	100
Size 3																
	Quartz		17	26.6	60	28	105	23.8	111	21.8	36	17.2	4	14.3	333	22.7
	Quartzite		30	46.9	88	41.1	239	54.2	300	58.8	131	62.7	18	64.3	806	55
	Orthoquartzite		1	1.6	4	1.9	13	2.9	15	2.9	7	3.3	1	3.6	41	2.8
	Metavolcanic		15	23.4	56	26.2	72	16.3	58	11.4	33	15.8	5	17.9	239	16.3
	Syenite		-	-	2	0.9	10	2.3	12	2.4	1	0.5	-	-	25	1.7
	Indeterminate		1	1.6	4	1.9	2	0.5	14	2.7	1	0.5	-	-	22	1.5
		Totals	64	100	214	100	441	100	510	100	209	100	28	100	1466	100
Size 4																
	Quartz		25	32.9	124	31.4	312	32.4	259	27.2	149	27.3	15	34.9	884	29.7
	Quartzite		33	43.4	115	29.1	412	42.7	456	47.8	283	51.8	17	39.5	1316	44.2
	Orthoquartzite		-	-	-	-	8	0.8	10	1	7	1.3	1	2.3	26	0.9
	Metavolcanic		17	22.4	153	38.7	223	23.1	215	22.6	105	19.2	10	23.3	723	24.3
	Syenite		1	1.3	-	-	6	0.6	13	1.4	2	0.4	-	-	22	0.7
	Indeterminate		-	-	3	0.8	3	0.3	-	-	-	-	-	-	6	0.2
		Totals	76	100	395	100	964	100	953	100	546	100	43	100	2977	100

Table D.4. Ceramic sherd frequencies by type, surface treatment, and size grade.

Type	Surface Treatment		Size 1		Size 2		Totals	
			n	%	n	%	n	%
Unidentified Sand Tempered								
	Cord		1	100	7	50	8	53.3
	Fabric		-	-	4	28.6	4	26.7
	Incised		-	-	1	7.1	1	6.7
	Plain		-	-	2	14.3	2	13.3
		Totals	1	100	14	100	15	100
Deep Creek								
	Cord		3	37.5	12	50	15	46.9
	Fabric		4	50	6	25	10	31.3
	Net		1	12.5	4	16.7	5	15.6
	Plain		-	-	2	8.3	2	6.3
		Totals	8	100	24	100	32	100
Hanover								
	Cord		-	-	2	25	2	25
	Fabric		-	-	4	50	4	50
	Plain		-	-	2	25	2	25
		Totals	-	-	8	100	8	100
Mount Pleasant								
	Cord		-	-	5	26.3	5	20.8
	Fabric		2	40	2	10.5	4	16.7
	Incised		3	60	3	15.8	6	25
	Plain		-	-	9	47.4	9	37.5
		Totals	5	100	19	100	24	100

Table D.5. Indeterminate sherd frequencies by size.

Indeterminate	Size 1		Size 2		Size 3		Size 4		Totals	
	n	%	n	%	n	%	n	%	**n**	**%**
Totals	1	0.9	20	17.7	91	80.5	1	0.9	113	100

Table D.6. Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
234	STP 2	Level 3	LF, HFM	06/23/09	1	Large Syenite Chunk
235	STP 3	Level 2	Luke, Sherry	06/23/09	1	
236	STP 3	Level 3	Luke, Sherry	06/23/09	1	
237	STP 3	Level 4	Luke, Sherry	06/23/09	1	
238	STP 4	Level 1	MG, EH, LS	06/23/09	1	
239	STP 4	Level 2	MG, EH, LS	06/23/09	1	
240	STP 4	Level 3	MG, EH, LS	06/23/09	1	
241	STP 4	Level 4	MG, EH, LS	06/23/09	1	
242	STP 5	Level 1	JS	06/23/09	1	
243	STP 5	Level 2	JS	06/23/09	1	
244	STP 5	Level 3	JS	06/23/09	1	
245	STP 5	Level 4	JS	06/23/09	1	
246	STP 5	Level 5	JS	06/23/09	1	
247	STP 6	Level 3	EH, MG	06/24/09	1	
248	STP 6	Level 4	EH, MG	06/24/09	1	
249	STP 6	Level 5	EH, MG	06/24/09	1	
250	Surface	Surface	MD	06/24/09	1	Surface Collection
251	STP 8	Level 1	SG	06/24/09	1	
252	STP 8	Level 2	SG	06/24/09	1	
253	STP 8	Level 3	SG	06/24/09	1	
254	STP 8	Level 4	JS	06/24/09	1	
255	STP 8	Level 5	JS	06/24/09	1	
256	STP 9	Level 1	RP, LS	06/24/09	1	
257	STP 9	Level 2	RP, LS	06/24/09	1	
258	STP 9	Level 3	RP, LS	06/24/09	1	
259	STP 9	Level 4	RP, LS	06/24/09	1	
260	STP 9	Level 5	RP, LS	06/24/09	1	
261	STP 10	Level 2	MS, JN	06/24/09	1	
262	STP 10	Level 3	MS, JN	06/24/09	1	
263	STP 10	Level 4	MS, JN	06/24/09	1	
264	STP 10	Level 5	MS, JN	06/24/09	1	
265	STP 11	Level 1	LF, HFM	06/24/09	1	
266	STP 11	Level 2	LF, HFM	06/24/09	1	
267	STP 11	Level 3	LF, HFM	06/24/09	1	
268	STP 11	Level 4	LF, HFM	06/24/09	1	
269	STP 11	Level 5	LF, HFM	06/24/09	1	
270	STP 12	Level 1	EH, MG	06/25/09	1	
271	STP 12	Level 2	EH, MG	06/25/09	1	
272	STP 12	Level 3	EH, MG	06/25/09	1	
273	STP 12	Level 4	EH, MG	06/25/09	1	
274	STP 12	Level 5	EH, MG	06/25/09	1	
275	STP 13	Level 1	LS, RP	06/25/09	1	
276	STP 13	Level 2	LS, RP	06/25/09	1	
277	STP 13	Level 3	LS, RP	06/25/09	1	
278	STP 16	Level 2	EH, MG	06/25/09	1	
279	STP 16	Level 3	EH, MG	06/25/09	1	
280	STP 16	Level 4	EH, MG	06/25/09	1	
281	STP 16	Level 5	EH, MG	06/25/09	1	
282	STP 17	Level 1	JLR, ST	06/25/09	1	
283	STP 17	Level 2	JLR, ST	06/25/09	1	
284	STP 17	Level 3	JLR, ST	06/25/09	1	
285	STP 17	Level 4	JLR, ST	06/25/09	1	
286	STP 17	Level 5	JLR, ST	06/25/09	1	
287	STP 18	Level 2	MS, JN	06/25/09	1	
288	STP 18	Level 3	MS, JN	06/25/09	1	
289	STP 18	Level 4	MS, JN	06/25/09	1	
290	STP 18	Level 5	MS, JN	06/25/09	1	
291	STP 22	Level 1	JS	06/25/09	1	
292	STP 22	Level 2	JS	06/25/09	1	
293	STP 22	Level 3	JS	06/25/09	1	
294	STP 22	Level 4	JS	06/25/09	1	
295	STP 22	Level 5	JS	06/25/09	1	
296	STP 23	Level 2	JS	06/25/09	1	
297	STP 23	Level 3	JS	06/25/09	1	
298	STP 23	Level 3	JS	06/25/09	1	Morrow Mtn. Point
299	STP 23	Level 4	JS	06/25/09	1	
300	STP 23	Level 5	JS	06/25/09	1	
301	STP 23	Level 6	JS	06/25/09	1	100-115 cmbs
302	STP 34	Level 2	MS, JN	06/25/09	1	
303	STP 34	Level 3	MS, JN	06/25/09	1	
304	STP 34	Level 4	MS, JN	06/25/09	1	
305	STP 34	Level 5	MS, JN	06/25/09	1	
306	STP 19	Level 2	JLR, ST	06/26/09	1	
307	STP 19	Level 3	JLR, ST	06/26/09	1	
308	STP 19	Level 4	JLR, ST	06/26/09	1	
309	STP 19	Level 5	JLR, ST	06/26/09	1	
310	STP 30	Level 1	TH, SG, JS	06/26/09	1	
311	STP 30	Level 2	TH, SG, JS	06/26/09	1	
312	STP 30	Level 3	TH, SG, JS	06/26/09	1	
313	STP 30	Level 4	TH, SG, JS	06/26/09	1	
314	STP 30	Level 5	TH, SG, JS	06/26/09	1	
315	STP 35	Level 1	LS, RP	06/26/09	1	
316	STP 35	Level 3	LS, RP	06/26/09	1	
317	STP 35	Level 4	LS, RP	06/26/09	1	(Continued)

Table D.6. (Cont) Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
318	STP 35	Level 5	LS, RP	06/26/09	1	
319	STP 28	Level 1	LF, HFM	06/26/09	1	
320	STP 28	Level 2	LF, HFM	06/26/09	1	
321	STP 28	Level 3	LF, HFM	06/26/09	1	
322	STP 28	Level 4	LF, HFM	06/26/09	1	
323	STP 28	Level 5	LF, HFM	06/26/09	1	
324	STP 15	Level 3	EH, MG	06/26/09	1	
325	STP 15	Level 4	EH, MG	06/26/09	1	
326	STP 15	Level 5	EH, MG	06/26/09	1	
327	STP 31	Level 1	EH, MG	06/26/09	1	
328	STP 31	Level 2	EH, MG	06/26/09	1	
329	STP 31	Level 3	EH, MG	06/26/09	1	
330	STP 31	Level 4	EH, MG	06/26/09	1	
331	STP 31	Level 5	EH, MG	06/26/09	1	
332	STP 38	Level 3	LF, HFM	06/27/09	1	
333	STP 38	Level 4	LF, HFM	06/27/09	1	
334	STP 25	Level 2	EH, MG	06/27/09	1	
335	STP 25	Level 3	EH, MG	06/27/09	1	
336	STP 25	Level 4	EH, MG	06/27/09	1	
337	STP 25	Level 5	EH, MG	06/27/09	1	
338	STP 24	Level 2	TH, SG, JS	06/27/09	1	
339	STP 24	Level 3	TH, SG, JS	06/27/09	1	
340	STP 24	Level 4	TH, SG, JS	06/27/09	1	
341	STP 24	Level 5	TH, SG, JS	06/27/09	1	
342	STP 36	Level 4	JLR, ST	06/27/09	1	
343	STP 39	Level 2	MS, JN	06/27/09	1	
344	STP 39	Level 3	MS, JN	06/27/09	1	
345	STP 39	Level 4	MS, JN	06/27/09	1	
346	STP 39	Level 5	MS, JN	06/27/09	1	
347	STP 21	Level 3	MS, JN	06/27/09	1	
348	STP 32	Level 3	LS, RP	06/27/09	1	
349	STP 32	Level 4	LS, RP	06/27/09	1	
350	STP 32	Level 5	LS, RP	06/27/09	1	
351	STP 33	Level 4	LS, RP	06/27/09	1	
352	STP 40	Level 2	LF, HFM	06/29/09	1	
353	STP 40	Level 3	LF, HFM	06/29/09	1	Guilford Point
354	STP 40	Level 3	LF, HFM	06/29/09	1	
355	STP 40	Level 4	LF, HFM	06/29/09	1	Biface
356	STP 40	Level 4	LF, HFM	06/29/09	1	Guilford Base
357	STP 40	Level 4	LF, HFM	06/29/09	1	
358	STP 40	Level 5	LF, HFM	06/29/09	1	
359	STP 26	Level 2	JN, ST, MG	06/29/09	1	
360	STP 26	Level 3	JN, ST, MG	06/29/09	1	
361	STP 26	Level 4	JN, ST, MG	06/29/09	1	
362	STP 26	Level 5	JN, ST, MG	06/29/09	1	
363	STP 41	Level 2	JS, MS	06/29/09	1	
364	STP 41	Level 3	JS, MS	06/29/09	1	
365	STP 41	Level 4	JS, MS	06/29/09	1	
366	STP 53	Level 1	SG, EH	06/29/09	1	
367	STP 53	Level 2	SG, EH	06/29/09	1	
368	STP 53	Level 3	SG, EH	06/29/09	1	
369	STP 53	Level 4	SG, EH	06/29/09	1	
370	STP 53	Level 5	SG, EH	06/29/09	1	
371	STP 53	Level 6	SG, EH	06/29/09	1	
372	STP 66	Level 1	LR, TH	06/29/09	1	
373	STP 66	Level 2	LR, TH	06/29/09	1	
374	STP 66	Level 3	LR, TH	06/29/09	1	
375	STP 66	Level 4	LR, TH	06/29/09	1	
376	STP 66	Level 5	LR, TH	06/29/09	1	
377	STP 48	Level 1	JS, MS	06/29/09	1	
378	STP 48	Level 2	JS, MS	06/29/09	1	
379	STP 48	Level 3	JS, MS	06/29/09	1	
380	STP 48	Level 4	JS, MS	06/29/09	1	
381	STP 48	Level 5	JS, MS	06/29/09	1	
382	STP 42	Level 1	LF, HFM	06/29/09	1	
383	STP 42	Level 4	LF, HFM	06/29/09	1	
384	STP 47	Level 1	SG, EH	06/29/09	1	
385	STP 47	Level 2	SG, EH	06/29/09	1	
386	STP 47	Level 3	SG, EH	06/29/09	1	
387	STP 47	Level 4	SG, EH	06/29/09	1	
388	STP 47	Level 5	SG, EH	06/29/09	1	
389	STP 46	Level 1	LS, RP	06/29/09	1	
390	STP 46	Level 2	LS, RP	06/29/09	1	
391	STP 46	Level 3	LS, RP	06/29/09	1	Side-notched Base 55-60 cmbs
392	STP 46	Level 3	LS, RP	06/29/09	1	
393	STP 46	Level 4	LS, RP	06/29/09	1	Large Cobble 74 cmbs
394	STP 46	Level 4	LS, RP	06/29/09	1	
395	STP 46	Level 5	LS, RP	06/29/09	1	
396	STP 46	Level 6	LS, RP	06/29/09	1	
397	STP 49	Level 2	JN, ST, MG	06/30/09	1	
398	STP 49	Level 3	JN, ST, MG	06/30/09	1	
399	STP 49	Level 4	JN, ST, MG	06/30/09	1	
400	STP 49	Level 5	JN, ST, MG	06/30/09	1	
401	STP 27	Level 4	JN, ST, MG	06/30/09	1	
402	STP 55	Level 1	LF, HFM	06/30/09	1	(Continued)

Table D.6. (Cont) Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
404	STP 55	Level 2	LF, HFM	06/30/09	1	
405	STP 55	Level 3	LF, HFM	06/30/09	1	
406	STP 55	Level 4	LF, HFM	06/30/09	1	
407	STP 55	Level 5	LF, HFM	06/30/09	1	
408	STP 44	Level 2	SG, EH	06/30/09	1	
409	STP 44	Level 4	SG, EH	06/30/09	1	
410	STP 44	Level 5	SG, EH	06/30/09	1	
411	STP 51	Level 1	LS, RP	06/30/09	1	
412	STP 51	Level 2	LS, RP	06/30/09	1	
413	STP 51	Level 3	LS, RP	06/30/09	1	
414	STP 45	Level 2	LR, TH	06/30/09	1	
415	STP 45	Level 3	LR, TH	06/30/09	1	
416	STP 45	Level 4	LR, TH	06/30/09	1	
417	STP 45	Level 5	LR, TH	06/30/09	1	Quartz Endscraper
418	STP 45	Level 5	LR, TH	06/30/09	1	
419	STP 45	Level 6	LR, TH	06/30/09	1	
420	STP 54	Level 1	JS, MS	07/01/09	1	
421	STP 54	Level 2	JS, MS	07/01/09	1	
422	STP 54	Level 3	JS, MS	07/01/09	1	
423	STP 54	Level 4	JS, MS	07/01/09	1	Large Tab. Frag
424	STP 54	Level 4	JS, MS	07/01/09	1	
425	STP 54	Level 5	JS, MS	07/01/09	1	
426	STP 59	Level 1	SG, EH	07/01/09	1	
427	STP 59	Level 2	SG, EH	07/01/09	1	
428	STP 59	Level 3	SG, EH	07/01/09	1	
429	STP 59	Level 4	SG, EH	07/01/09	1	
430	STP 59	Level 5	SG, EH	07/01/09	1	
431	STP 59	Level 6	SG, EH	07/01/09	1	
432	STP 60	Level 1	LF, HFM	07/01/09	1	
433	STP 60	Level 3	LF, HFM	07/01/09	1	
434	STP 52	Level 2	JN, ST, MG	07/01/09	1	
435	STP 52	Level 3	JN, ST, MG	07/01/09	1	
436	STP 52	Level 4	JN, ST, MG	07/01/09	1	
437	STP 52	Level 5	JN, ST, MG	07/01/09	1	
438	STP 52	Level 6	JN, ST, MG	07/01/09	1	
439	STP 58	Level 1	LS, RP	07/01/09	1	
440	STP 58	Level 2	LS, RP	07/01/09	1	
441	STP 58	Level 3	LS, RP	07/01/09	1	
442	STP 58	Level 4	LS, RP	07/01/09	1	
443	STP 58	Level 5	LS, RP	07/01/09	1	
444	STP 58	Level 6	LS, RP	07/01/09	1	
445	STP 57	Level 1	LR, TH	07/01/09	1	
446	STP 57	Level 2	LR, TH	07/01/09	1	
447	STP 57	Level 3	LR, TH	07/01/09	1	
448	STP 57	Level 4	LR, TH	07/01/09	1	
449	STP 57	Level 5	LR, TH	07/01/09	1	
450	STP 57	Level 5	LR, TH	07/01/09	1	Rhyolite Endscraper
451	STP 62	Level 1	LF, HFM	07/01/09	1	
452	STP 62	Level 2	LF, HFM	07/01/09	1	
453	STP 62	Level 3	LF, HFM	07/01/09	1	
454	STP 62	Level 4	LF, HFM	07/01/09	1	
455	STP 62	Level 5	LF, HFM	07/01/09	1	
456	STP 63	Level 1	JS, MS	07/01/09	1	
457	STP 63	Level 2	JS, MS	07/01/09	1	
458	STP 63	Level 3	JS, MS	07/01/09	1	
459	STP 63	Level 4	JS, MS	07/01/09	1	
460	STP 63	Level 5	JS, MS	07/01/09	1	
461	STP 61	Level 4	SG, EH	07/01/09	1	
462	STP 64	Level 1	JN, ST, MG	07/02/09	1	
463	STP 64	Level 2	JN, ST, MG	07/02/09	1	
464	STP 64	Level 3	JN, ST, MG	07/02/09	1	Guilford Point
465	STP 64	Level 3	JN, ST, MG	07/02/09	1	
466	STP 64	Level 4/5	JN, ST, MG	07/02/09	1	Considered Level 4 for Data Purposes
467	?	?	?	07/02/09	0	?
468	?	?	?	07/02/09	0	?
469	STP 68	Level 1	SG, EH	07/02/09	1	No Artifacts
470	STP 68	Level 2	SG, EH	07/02/09	1	
471	STP 68	Level 3	SG, EH	07/02/09	1	
472	STP 68	Level 4	SG, EH	07/02/09	1	
473	STP 68	Level 5	SG, EH	07/02/09	1	
474	STP 70	Level 1	LR, TH	07/02/09	1	
475	STP 70	Level 2	LR, TH	07/02/09	1	
476	STP 70	Level 3	LR, TH	07/02/09	1	
477	STP 70	Level 4	LR, TH	07/02/09	1	Cobble Re-fit
478	STP 70	Level 4	LR, TH	07/02/09	1	
479	STP 70	Level 5	LR, TH	07/02/09	1	
480	STP 65	Level 1	LS, RP	07/02/09	1	
481	STP 65	Level 2	LS, RP	07/02/09	1	
482	STP 65	Level 3	LS, RP	07/02/09	1	
483	STP 65	Level 4	LS, RP	07/02/09	1	
484	STP 65	Level 5	LS, RP	07/02/09	1	
485	STP 74	Level 1	JS, MS	07/02/09	1	
486	STP 74	Level 2	JS, MS	07/02/09	1	
487	STP 74	Level 3	JS, MS	07/02/09	1	Yadkin Point
488	STP 74	Level 3	JS, MS	07/02/09	1	
489	STP 74	Level 4	JS, MS	07/02/09	1	(Continued)

Table D.6. (Cont) Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
491	STP 74	Level 6	JS, MS	07/02/09	1	
492	STP 69	Level 2	LF, HFM	07/06/09	1	
493	STP 69	Level 3	LF, HFM	07/06/09	1	
494	STP 69	Level 4	LF, HFM	07/06/09	1	
495	STP 69	Level 5	LF, HFM	07/06/09	1	
496	STP 69	Level 6	LF, HFM	07/06/09	1	
497	STP 73	Level 2	LR, EH	07/06/09	1	
498	STP 73	Level 3	LR, EH	07/06/09	1	
499	STP 73	Level 4	LR, EH	07/06/09	1	Biface
500	STP 73	Level 4	LR, EH	07/06/09	1	
501	STP 73	Level 5	LR, EH	07/06/09	1	
502	STP 72	Level 4	LR, EH	07/06/09	1	
503	STP 72	Level 5	LR, EH	07/06/09	1	
504	STP 75	Level 1	SG, TH	07/06/09	1	
505	STP 75	Level 2	SG, TH	07/06/09	1	
506	STP 75	Level 3	SG, TH	07/06/09	1	
507	STP 75	Level 4	SG, TH	07/06/09	1	
508	STP 75	Level 5	SG, TH	07/06/09	1	
509	STP 71	Level 5	LF, HFM	07/06/09	1	
510	STP 78	Level 4	LR, EH	07/06/09	1	
511	STP 76	Level 1	JN, ST, MG	07/06/09	1	
512	STP 76	Level 2	JN, ST, MG	07/06/09	1	
513	STP 76	Level 3	JN, ST, MG	07/06/09	1	
514	STP 76	Level 5	JN, ST, MG	07/06/09	1	
515	STP 77	Level 1	JS, MS	07/06/09	1	
516	STP 77	Level 2	JS, MS	07/06/09	1	Randolph/Badin 39 cmbs
517	STP 77	Level 2	JS, MS	07/06/09	1	
518	STP 81	Level 1	LS, RP	07/06/09	1	
519	STP 81	Level 2	LS, RP	07/06/09	1	
520	STP 81	Level 3	LS, RP	07/06/09	1	
521	STP 81	Level 4	LS, RP	07/06/09	1	
522	STP 81	Level 5	LS, RP	07/06/09	1	
523	STP 84	Level 3	LR, EH	07/06/09	1	
524	STP 84	Level 4	LR, EH	07/06/09	1	No Artifacts
525	STP 84	Level 5	LR, EH	07/06/09	1	No Artifacts
526	STP 80	Level 1	SG, TH	07/07/09	1	
527	STP 80	Level 2	SG, TH	07/07/09	1	
528	STP 80	Level 3	SG, TH	07/07/09	1	
529	STP 80	Level 4	SG, TH	07/07/09	1	
530	STP 80	Level 5	SG, TH	07/07/09	1	
531	STP 82	Level 2	LF, HFM	07/07/09	1	
532	STP 82	Level 3	LF, HFM	07/07/09	1	
533	STP 82	Level 4	LF, HFM	07/07/09	1	Preform, Basal Thinning
534	STP 82	Level 4	LF, HFM	07/07/09	1	
535	STP 82	Level 5	LF, HFM	07/07/09	1	
536	STP 87	Level 1	JS, MS	07/07/09	1	
537	STP 87	Level 2	JS, MS	07/07/09	1	
538	STP 87	Level 3	JS, MS	07/07/09	1	
539	STP 87	Level 4	JS, MS	07/07/09	1	
540	STP 87	Level 5	JS, MS	07/07/09	1	
541	STP 92	Level 1	SG, TH	07/07/09	1	
542	STP 92	Level 2	SG, TH	07/07/09	1	
543	STP 92	Level 3	SG, TH	07/07/09	1	
544	STP 92	Level 4	SG, TH	07/07/09	1	
545	STP 92	Level 5	SG, TH	07/07/09	1	No Artifacts
546	STP 86	Level 1	LS, RP	07/07/09	1	
547	STP 86	Level 2	LS, RP	07/07/09	1	
548	STP 86	Level 3	LS, RP	07/07/09	1	
549	STP 86	Level 4	LS, RP	07/07/09	1	
550	STP 86	Level 5	LS, RP	07/07/09	1	
551	STP 83	Level 1	JN, ST, MG	07/07/09	1	
552	STP 83	Level 2	JN, ST, MG	07/07/09	1	
553	STP 83	Level 3	JN, ST, MG	07/07/09	1	
554	STP 83	Level 4	JN, ST, MG	07/07/09	1	
555	STP 83	Level 5	JN, ST, MG	07/07/09	1	No Artifacts
556	STP 67	Level 2	LR, EH	07/07/09	1	
557	STP 67	Level 3	LR, EH	07/07/09	1	
558	STP 67	Level 4	LR, EH	07/07/09	1	
559	STP 67	Level 5	LR, EH	07/07/09	1	
560	STP 85	Level 1	LF, HFM	07/08/09	1	
561	STP 85	Level 2	LF, HFM	07/08/09	1	
562	STP 85	Level 3	LF, HFM	07/08/09	1	
563	STP 85	Level 4	LF, HFM	07/08/09	1	
564	STP 85	Level 5	LF, HFM	07/08/09	1	
565	STP 94	Level 2	LR, EH	07/08/09	1	
566	STP 94	Level 3	LR, EH	07/08/09	1	
567	STP 94	Level 4	LR, EH	07/08/09	1	
568	STP 94	Level 5	LR, EH	07/08/09	1	
569	STP 95	Level 2	SG, TH	07/08/09	1	Woodland Point
570	STP 95	Level 2	SG, TH	07/08/09	1	
571	STP 95	Level 3	SG, TH	07/08/09	1	
572	STP 95	Level 4	SG, TH	07/08/09	1	
573	STP 95	Level 5	SG, TH	07/08/09	1	
574	STP 91	Level 1	JS, MS	07/08/09	1	
575	STP 91	Level 2	JS, MS	07/08/09	1	
576	STP 91	Level 3	JS, MS	07/08/09	1	(Continued)

Table D.6. (Cont) Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
577	STP 91	Level 4	JS, MS	07/08/09	1	
578	STP 91	Level 5	JS, MS	07/08/09	1	
579	STP 96	Level 1	JN, ST, MG	07/08/09	1	
580	STP 96	Level 2	JN, ST, MG	07/08/09	1	
581	STP 96	Level 3	JN, ST, MG	07/08/09	1	
582	STP 96	Level 4	JN, ST, MG	07/08/09	1	
583	STP 96	Level 5	JN, ST, MG	07/08/09	1	
584	STP 98	Level 2	LR, EH	07/08/09	1	
585	STP 98	Level 3	LR, EH	07/08/09	1	Point Tip
586	STP 98	Level 3	LR, EH	07/08/09	1	
587	STP 98	Level 4	LR, EH	07/08/09	1	
588	STP 98	Level 5	LR, EH	07/08/09	1	Biface Refit
589	STP 98	Level 5	LR, EH	07/08/09	1	
590	STP 98	Level 6	LR, EH	07/08/09	1	
591	STP 90	Level 1	LS, RP	07/09/09	1	
592	STP 90	Level 2	LS, RP	07/09/09	1	
593	STP 90	Level 3	LS, RP	07/09/09	1	
594	STP 90	Level 4	LS, RP	07/09/09	1	
595	STP 90	Level 5	LS, RP	07/09/09	1	
596	STP 79	Level 1	LF, HFM	07/09/09	1	
597	STP 79	Level 2	LF, HFM	07/09/09	1	
598	STP 79	Level 3	LF, HFM	07/09/09	1	
599	STP 79	Level 4	LF, HFM	07/09/09	1	
600	STP 79	Level 5	LF, HFM	07/09/09	1	
601	STP 88	Level 1	SG, TH	07/09/09	1	
602	STP 88	Level 3	SG, TH	07/09/09	1	
603	STP 88	Level 4	SG, TH	07/09/09	1	
604	STP 88	Level 5	SG, TH	07/09/09	1	
605	STP 93	Level 1	JS, MS	07/09/09	1	No Artifacts
606	STP 93	Level 3	JS, MS	07/09/09	1	
607	STP 93	Level 4	JS, MS	07/09/09	1	
608	STP 97	Level 1	LR, EH	07/09/09	1	
609	STP 97	Level 2	LR, EH	07/09/09	1	
610	STP 97	Level 3	LR, EH	07/09/09	1	
611	STP 97	Level 4	LR, EH	07/09/09	1	
612	STP 97	Level 5	LR, EH	07/09/09	1	
613	STP 99	Level 1	JN, ST, MG	07/09/09	1	
614	STP 99	Level 2	JN, ST, MG	07/09/09	1	
615	STP 99	Level 3	JN, ST, MG	07/09/09	1	
616	STP 99	Level 4	JN, ST, MG	07/09/09	1	
617	STP 99	Level 5	JN, ST, MG	07/09/09	1	
618	STP 104	Level 1	JS, MS	07/09/09	1	
619	STP 104	Level 2	JS, MS	07/09/09	1	
620	STP 104	Level 3	JS, MS	07/09/09	1	
621	STP 104	Level 4	JS, MS	07/09/09	1	
622	STP 104	Level 5	JS, MS	07/09/09	1	
623	STP 100	Level 1	SG, TH	07/09/09	1	
624	STP 100	Level 3	SG, TH	07/09/09	1	
625	STP 100	Level 4	SG, TH	07/09/09	1	
626	STP 100	Level 5	SG, TH	07/09/09	1	
627	STP 101	Level 1	LS, RP	07/09/09	1	
628	STP 101	Level 2	LS, RP	07/09/09	1	
629	STP 101	Level 3	LS, RP	07/09/09	1	
630	STP 101	Level 3	LS, RP	07/09/09	1	Large Cobble Frags
631	STP 101	Level 3	LS, RP	07/09/09	1	Biface Tip
632	STP 101	Level 4	LS, RP	07/09/09	1	
633	STP 101	Level 5	LS, RP	07/09/09	1	
634	STP 103	Level 3	LR, EH	07/09/09	1	
635	STP 103	Level 4	LR, EH	07/09/09	1	
636	STP 103	Level 5	LR, EH	07/09/09	1	
637	STP 102	Level 1	LF, HFM	07/09/09	1	
638	STP 102	Level 2	LF, HFM	07/09/09	1	
639	STP 102	Level 3	LF, HFM	07/09/09	1	
640	STP 102	Level 3	LF, HFM	07/09/09	1	Soapstone Sherd
641	STP 102	Level 3	LF, HFM	07/09/09	1	Flaked Cobble
642	STP 102	Level 4	LF, HFM	07/09/09	1	
643	STP 102	Level 5	LF, HFM	07/09/09	1	
644	STP 105	Level 4	JS, MS	07/10/09	1	
645	STP 106	Level 1	LS, RP	07/10/09	1	
646	STP 106	Level 2	LS, RP	07/10/09	1	
647	STP 106	Level 3	LS, RP	07/10/09	1	
648	STP 106	Level 4	LS, RP	07/10/09	1	
649	STP 106	Level 5	LS, RP	07/10/09	1	
650	STP 112	Level 1	SG, TH	07/10/09	1	
651	STP 112	Level 2	SG, TH	07/10/09	1	
652	STP 112	Level 3	SG, TH	07/10/09	1	
653	STP 112	Level 4	SG, TH	07/10/09	1	Early Biface
654	STP 112	Level 4	SG, TH	07/10/09	1	
655	STP 112	Level 5	SG, TH	07/10/09	1	
656	STP 89	Level 2	LR, EH	07/10/09	1	
657	STP 89	Level 3	LR, EH	07/10/09	1	
658	STP 89	Level 4	LR, EH	07/10/09	1	
659	STP 89	Level 5	LR, EH	07/10/09	1	
660	STP 107	Level 1	JN, ST, MG	07/10/09	1	
661	STP 107	Level 2	JN, ST, MG	07/10/09	1	Morrow Mtn. Point
662	STP 107	Level 2	JN, ST, MG	07/10/09	1	(Continued)

Table D.6. (Cont) Field specimen log for 2009 field season.

FS No.	Unit	Provenience	Excavator	Date	# Bags	Comments
663	STP 107	Level 3	JN, ST, MG	07/10/09	1	
664	STP 107	Level 4	JN, ST, MG	07/10/09	1	
665	STP 107	Level 5	JN, ST, MG	07/10/09	1	
666	STP 111	Level 2	SG, TH	07/10/09	1	
667	STP 111	Level 3	SG, TH	07/10/09	1	
668	STP 111	Level 4	SG, TH	07/10/09	1	No Artifacts
669	STP 108	Level 1	JS, MS	07/10/09	1	
670	STP 108	Level 2	JS, MS	07/10/09	1	Base of Yadkin Pt.
671	STP 108	Level 2	JS, MS	07/10/09	1	
672	STP 108	Level 3	JS, MS	07/10/09	1	
673	STP 108	Level 4	JS, MS	07/10/09	1	
674	STP 108	Level 5	JS, MS	07/10/09	1	
675	STP 110	Level 1	LF, HFM	07/10/09	1	Woodland Point
676	STP 110	Level 1	LF, HFM	07/10/09	1	
677	STP 110	Level 2	LF, HFM	07/10/09	1	
678	STP 110	Level 3	LF, HFM	07/10/09	1	
679	STP 110	Level 4	LF, HFM	07/10/09	1	
680	STP 110	Level 5	LF, HFM	07/10/09	1	
681	STP 114	Level 3	LR, EH	07/10/09	1	No Artifacts
682	STP 114	Level 5	LR, EH	07/10/09	1	No Artifacts
683	STP 109	Level 1	LS, RP	07/10/09	1	
684	STP 109	Level 2	LS, RP	07/10/09	1	
685	STP 109	Level 3	LS, RP	07/10/09	1	
686	STP 109	Level 4	LS, RP	07/10/09	1	
687	STP 109	Level 5	LS, RP	07/10/09	1	
688	STP 113	Level 1	JN, ST, MG	07/10/09	1	
689	STP 113	Level 2	JN, ST, MG	07/10/09	1	
690	STP 113	Level 3	JN, ST, MG	07/10/09	1	
691	STP 113	Level 4	JN, ST, MG	07/10/09	1	
692	TU 1	Squires Ridge			1	Grain Size Samples*
693	TU 2	Squires Ridge			2	Grain Size Samples*
694	TU 2 (Vicinity)	Squires Ridge			1	Auger Grain Size Samples (140-380 cmbs)
695	E. 445 Trench	Barber Creek			1	Auger Grain Size Samples (160-333 cmbs)
696	TU 2	Taft Ridge			1	Grain Size Samples (7, 20-75 cmbs)
697	TU 2 (Vicinity)	Taft Ridge			1	Auger Grain Size Samples (100-400 cmbs)
698	TU 1	Owens Ridge			1	Grain Size Samples
699	TU 1 (Vicinity)	Owens Ridge			1	Auger Grain Size Samples (140-420 cmbs)
700	TU 1	Hart Ridge			1	Grain Size Samples
701	TU 1 (Vicinity)	Hart Ridge			1	Auger Grain Size Samples (120-400 cmbs)
702	TU 1	Squires Ridge			1	Sediment Samples (Left -over)
703	TU 2 (Vicinity)	Squires Ridge			2	Auger Sediment Samples (Left-over)
704	E. 445 Trench	Barber Creek			1	Auger Sediment Samples (Left-over, 160-360 cmbs)
705	TU 1 (Vicinity)	Hart Ridge			2	Auger Sediment Samples (Left-over, 85, 120-400 cmbs)
706	TU 1	Owens Ridge			1	Sediment Samples (Left -over, 5-140 cmbs)
707	TU 1 (Vicinity)	Owens Ridge			2	Auger Sediment Samples (Left-over, 160-420 cmbs)
708	TU 2 (Vicinity)	Taft Ridge			1	Auger Sediment Samples (Left-over)
709	Misc.	Tar River Survey			2	Misc. Grain Size and Sed. Samples
710	Heavy Mineral and Alluvium Spherules				1	eavy Minerls & "Spherules", Tar R & Green Mill Run
711	Misc. Bulk Soil Samples		Sahnnon Mahan		1	Left-over OSL Bulk Soil
712	TU 3	Level 2 Owens Ridge		07/01/09	1	
713	TU 3	Level 3 Owens Ridge		07/01/09	1	
714	TU 3	Level 4 Owens Ridge		07/01/09	1	
715	TU 3	Level 5 Owens Ridge		07/01/09	1	
716	TU 3	Level 6 Owens Ridge		07/01/09	1	
717	TU 3	Level 7 Owens Ridge		07/01/09	1	
718	TU 3	Level 8 Owens Ridge		07/01/09	1	
719	TU 3	Level 9 Owens Ridge		07/01/09	1	
720	TU 3	Level 10 Owens Ridge		07/01/09	1	
721	TU 3	Level 5 Owens Ridge			1	Point Tip Piece-Plot @ 48 cmbd
722	TU 3	Level 7 Owens Ridge			1	Uniface Piece-Plot @ 69 cmbd
723	TU 3	Level 8 Owens Ridge			1	Biface Frag @ 76 cmbd
724	TU 3	Level 8 Owens Ridge			1	Biface Preform on Cobble @ 80 cmbd
725	TU 3	Level 8 Owens Ridge			1	Large Cobble Flake @ 80 cmbd
726	TU 86	Level 4 Squires Ridge	LS, RP	07/07/09	1	Broken Biface
727	TU 94	Level 2 Squires Ridge	LR, EH	07/08/09	1	Broken Biface

Table D.7. Orientation data for shovel tests.

STP	Northing	Easting	Relative Surface Elevation	Notes
1	410.199	464.686	7.47	
2	405.819	474.552	8.448	
3	403.874	483.398	9.049	
4	399.911	493.242	9.66	
5	395.795	502.809	10.15	
6	393.404	509.135	10.38	
7	414.076	474.487	8.289	
8	417.656	483.084	8.688	
9	423.67	495.454	10.082	
10	426.703	504.866	10.4	
11	432.691	513.634	10.22	
12	435.956	523.906	9.799	
13	441.886	532.373	9.395	
14	427.003	478.457	8.765	
15	432.058	488.874	9.573	
16	435.265	496.243	10.199	
17	439.624	505.173	10.472	
18	443.113	514.043	10.266	
19	446.379	523.65	9.844	
20	435.215	474.581	8.511	
21	439.871	483.316	9.22	road edge
22	443.741	492.346	10.055	
23	448.465	501.432	10.514	
24	452.07	510.961	10.42	
25	456.438	518.49	10.156	
26	460.534	528.013	9.527	
27	448.539	479.545	9.105	road
28	455.933	488.346	9.933	
29	445.826	470.391	8.137	
30	455.793	499.879	10.583	
31	460.263	505.889	10.599	
32	466.026	514.972	10.365	
33	468.929	523.935	9.688	
34	418.758	508.702	10.417	
35	421.62	517.628	10.079	
36	426.638	527.364	9.496	
37	458.364	475.056	8.972	
38	462.144	483.639	9.607	
39	466.609	492.1	10.223	
40	471.028	502.001	10.735	
41	480.121	519.428	10.067	
42	484.879	526.974	9.492	
43	450.088	532.591	9.373	
44	470.344	478.622	9.362	
45	476.063	489.776	10.332	
46	479.653	497.858	10.743	
47	484.155	507.352	10.855	
48	488.563	515.612	10.513	
49	491.807	524.535	9.843	
50	480.024	474.665	9.145	
51	484.959	485.646	10.077	
52	490.136	492.866	10.581	
53	493.265	502.824	10.826	
54	497.67	511.557	10.683	
55	501.145	520.156	9.996	
56	494.183	480.194	9.788	
57	497.502	489.132	10.561	
58	501.617	497.652	10.844	
59	506.441	507.013	10.697	
60	510.925	516.238	9.908	
61	503.717	475.752	9.431	

(Continued)

Table D.7. (Cont) Orientation data for shovel tests.

STP	Northing	Easting	Relative Surface Elevation	Notes
63	511.791	492.712	10.711	
64	516.422	502.585	10.775	
65	520.422	511.253	10.268	
66	475.487	510.926	10.515	
67	516.517	480.232	10.048	
68	521.101	490.181	10.762	
69	524.964	498.447	10.882	
70	528.914	507.017	10.439	
71	532.682	515.727	9.586	
72	526.773	475.61	9.605	
73	530.889	484.452	10.482	
74	535.83	495.853	10.832	
75	539.837	502.78	10.709	
76	543.705	512.029	10.046	
77	547.678	520.455	9.202	
78	535.513	471.26	9.217	
79	540.512	479.761	10.192	
80	545.431	490.667	10.86	
81	548.022	499.111	10.716	
82	553.389	507.172	10.358	
83	557.842	516.481	9.501	
84	549.867	475.867	9.744	
85	555.15	485.972	10.709	
86	559.211	495.202	10.792	
87	563.391	503.169	10.432	
88	559.305	473.617	9.477	
89	562.685	481.645	10.274	
90	567.578	491.707	10.68	
91	568.162	502.449	10.499	
92	575.524	509.305	9.844	
93	573.091	477.055	9.609	
94	576.827	488.098	10.488	
95	580.673	495.733	10.508	
96	586.656	504.353	10.105	
97	585.52	482.984	10.26	
98	589.428	492.259	10.576	
99	592.596	501.369	10.195	
100	594.312	478.951	9.947	
101	598.389	488.018	10.527	
102	603.015	497.687	10.039	
103	603.59	474.623	9.484	
104	607.983	483.552	10.213	
105	612.092	470.626	9.022	
106	615.824	481.844	9.986	
107	625.715	475.788	9.444	
108	629.841	486.335	10.091	
109	637.982	491.046	10.043	
110	646.887	496.691	9.703	
111	649.877	504.809	9.153	
112	618.534	487.023	9.953	
113	611.504	490.724	9.931	
114	599.575	468.588	8.694	